Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

September 29, 1958

Cresylics Special Report Page 3

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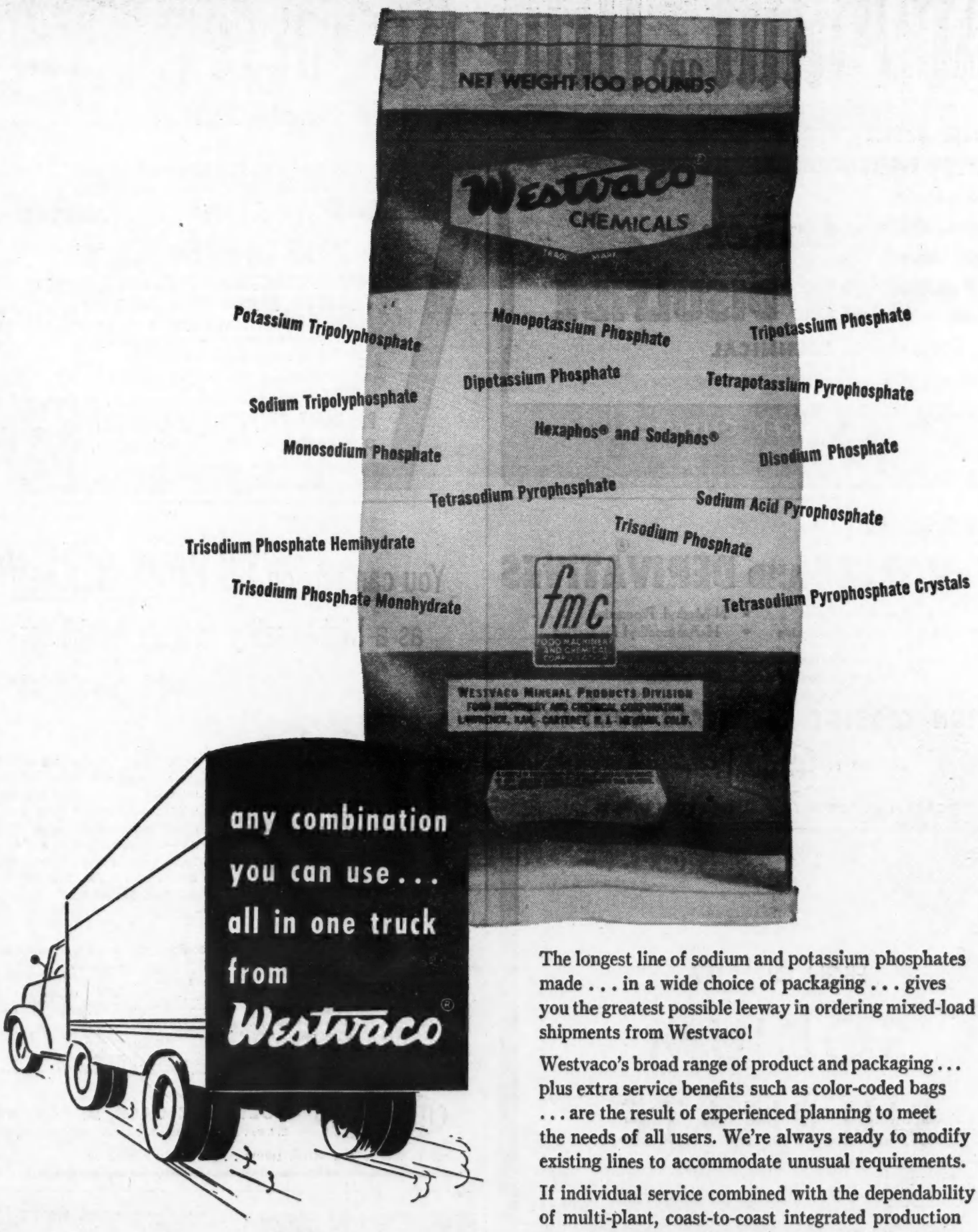

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Oil, Paint and Drug Reporter

Vol. 174 No. 14 30 Church St., New York 7, N. Y. September 29, 1958

CRESYLICS SALES PATTERN
Outlets for Domestic, Imported Material

Phenolic Resins	33.6 million lbs.
TCP-Type Esters	30.0 million lbs.
Disinfectants	12.5 million lbs.
Textiles, Medicinals, Dyes, Inks	10.4 million lbs.
Engine, Metal Cleaners	9.8 million lbs.
Ore Flotation	8.3 million lbs.
Exports	7.3 million lbs.
Wire Enamel Solvent	7.2 million lbs.
Miscellaneous	4.7 million lbs.
Total	123.8 million lbs.

Figures are for 1957 and include domestic sales of 104 million pounds and ADF acid imports of 19.8 million pounds.

Cresols and Cresylic Acid Makers Take Aim at '65 Target: Sales of 190 Million Pounds

OPD Special Report

Producers of cresols and cresylic acids, a bit hung over at present from too much business on the rocks, are hoping for a 10 percent increase in demand in 1959. Furthermore, they hope to do business to the tune of 190 million pounds annually by 1965. This year, domestic producers figure they'll be doing well to sell 100 million pounds. This compares with sales of 125 million pounds in 1956, the best sales year in modern history for cresylics. As recently as mid-1957, the industry was hoping it would sell close to 190 million pounds of cresylics in 1960-61.

But the late '57 and early '58 business slump has given rise to agonizing reappraisals in this industry, as in many others. Consequently, optimism is more cautious now, and the 190-million-pound target has been set back five years.

Why were producers hoping for a 190-million-pound market in 1961? This booming prediction was based on plans announced in 1956 by Pitt-Consol Chemical Company, which called for construction of a low temperature coal carbonization plant at Cresap, W. Va. The plant was originally slated to go on stream in 1960-61, with an annual capacity of 40 million pounds of cresylics a year.

Pitt-Consol Shelves Its Plans

Building of the plant was to begin this fall, but last May it became apparent that the Pittsburgh Consolidation Coal Company subsidiary had shelved its plans, after microscopic examination of current cresylic markets.

The decision to shelve was based chiefly on the following realizations:

- Business conditions in late 1957 and during most of this year have been far from propitious for launching such a large-scale project. Sales declined from 125 million pounds in 1956 to 104 million pounds in 1957, and could drop as low as 94 million pounds this year.
- Although researchers have been working hard to come up with new end-uses, none they have turned up so far would warrant a 40-million-pound jump in capacity. And, as Pitt-Consol's vice-president in charge of research and development, Joseph Pursglove, jr., pointed out in 1956,

—Continued on page 52

CRESYLICS OUTPUT

1965 . . .	*190 million lbs.
1960 . . .	*120 million lbs.
1959 . . .	*109 million lbs.
1958 . . .	*99 million lbs.
1957 . . .	109 million lbs.
1956 . . .	121 million lbs.
1955 . . .	101 million lbs.
1954 . . .	69 million lbs.

*Industry Estimate

Source: Tariff Commission

Celanese, ICI Teaming Up to Give DuPont 'Dacron' Run for Its Money

Celanese Corporation of America, New York, and Imperial Chemical Industries, Ltd., of England, are teaming up to give E. I. duPont de Nemours & Co. a run for its money in the polyester fiber field. Celanese and ICI have set up a fifty-fifty-owned subsidiary, to be known as Lindum Fibers Corporation. ICI will supply the know-how, and Celanese the textile marketing facilities for "Teron" fiber—a polyethylene terephthalate fiber produced now by ICI under the trademark "Terylene" and by duPont under the trade name "Dacron."

GETS SALES PROMOTION: Wallace J. Quick, appointed assistant general sales manager of the Distillation Products Industries division of Eastman Kodak Company, Rochester, N. Y. He had been head of the DPI sales office in Chicago.

Lindum will build a plant—at a site in this country yet unchosen—capable of producing 40 million pounds of "Teron" annually, according to Celanese' president, Harold Blancke.

Plant Could Come on Stream in 1961

Mr. Blancke estimates the plant will be ready to roll in the next eighteen months to two years, and should reach the 40-million-pound mark within the next five years.

In mid-1961, duPont's original patents on "Dacron will expire. The polyethylene terephthalate fiber was developed in England by Calico Printers' Association, Ltd., and patent rights for US production were sold outright to the Wilmington, Del., firm in 1947.

ICI acquired rights for world manufacture and sale—except in the United States—from Calico Printers in 1947, and by 1949 ICI was selling "Terylene." The British company is currently expanding its capacity to 50 million pounds a year.

The Celanese-ICI project is the first yet announced to make and market competitively in the United States a commercially established polyester fiber of the same chemical composition as "Dacron."

Since the introduction of this polyester fiber by ICI, more than 350 million pounds have been produced. ICI has also granted sub-licenses for manufacture in France, Italy, Germany, Holland and Japan.

An ICI subsidiary in Canada—Canadian

—Continued on page 70

Reichhold to Establish Affiliate in Hong Kong

Reichhold Chemicals, Inc., White Plains, N.Y., plans to establish jointly with prominent Hong Kong industrialists a Hong Kong affiliate for the manufacture of the company's entire line of synthetic resins.

The new company will be known as Reichhold Chemicals (Hong Kong), Ltd.

Plans are under way to build a two-story plant in the industrial section of Hong Kong, which will be ready for production by the spring of 1959. The plant will make the thirty-eighth which Reichhold maintains throughout the world.

Besides its product facilities, the building will be designed to include offices, laboratory and tankage space. It will occupy a property in the neighborhood of the Hong Kong airport.

Fertilizer Firms Study Prospects for a Merger

Willard R. Ashburn, president of Smith-Douglass Co., Inc., Norfolk, Va., has revealed that Smith-Douglass and the stockholders of Wilson & Toomer Company are exploring the possibility of a merger.

The latter is a fertilizer manufacturer in Georgia and Florida, with headquarters in Jacksonville, Fla. Smith-Douglass' mixed fertilizer plants are located in Virginia, North Carolina, Illinois, Minnesota and Texas.

Dow Adds Allyl Chloride

Allyl chloride has been added to Dow Chemical Company's product line at its Texas division. The company entered the allied allyl alcohol field at the same plant earlier this year.

Airco, Matico Form Cumberland Chemical

John A. Hill, president of Air Reduction Company, and Seymour Milstein, president of Mastic Tile Corporation of America, both of New York, today announced the formation of Cumberland Chemical Corporation for the production of materials for use by Mastic Tile in manufacturing floor coverings and other building construction products.

The new company, in which Airco holds a 60 percent stock interest and Matico a 40 percent stock interest, will construct and operate at Calvert City, Ky., a plant to produce vinyl chloride monomer and vinyl chloride polymer. It will also pro-

—Continued on page 70

HOOKER'S CHIEF OFFICER: Thomas E. Moffitt, president of Hooker Chemical Corporation, Niagara Falls, N. Y., named to succeed R. Lindley Murray as chief executive officer of the company. Mr. Murray will continue as chairman of the board, and will remain in active service until December 1.

Chemical Workers Union Weighing Second Merger

International Chemical Workers Union, already deep in merger negotiations with the 175,000-member Oil, Chemical & Atomic Workers Union, this week will start up consolidation talks with yet another labor organization—the Operating Engineers.

The discussions, scheduled for Wednesday (October 1) in Washington, are to be held at the invitation of the Operating Engineers who have asked ICWU to be prepared to talk about the "possibility of amalgamation."

The Operating Engineers have about 283,000 members, some of whom are production workers in chemical plants. ICWU claims a membership of around 80,000.

As for the ICWU-OCAW merger, agreement has been reached between representatives of the two unions on the necessary steps to be taken in working toward the proposed consolidation (OPD, 8/25/58).

The merger blueprint calls for a joint constitution committee to meet sometime between March 15 and May 15 of next year. After that, the proposed constitution is slated for review by a full merger committee.

As the final step, a convention of each union will have to vote to endorse the constitution before the merger can be consummated.

The timetable for the merger, already endorsed by the executive boards of the two unions, was sanctioned by the OCAW rank-and-file at that organization's convention last week in Long Beach, Calif.

ICWU members, who will convene in Washington next week, are expected to follow suit.

Lead, Zinc Importers Start 'Scramble' Under New Quotas

"Operation scramble" starts this week for importers of lead and zinc. Beginning October 1, not more than 88,680 short tons of lead and 130,240 short tons of zinc can come into the country from abroad in a three-months period; importers planning to get in under this ceiling are under compulsion to let the Treasury Department know early. Procedures for handling the flood of requests for a share of the available quotas are still being worked out by the department, but if past experience is any criterion the requests will be handled on a first-come-first-served basis.

Where there is likelihood that a quota will be filled on the first day, a deadline for filing will be fixed and all timely requests given a proportionate share of the total.

Invoked Under New Order

A quota system for lead and zinc imports is being invoked under Presidential proclamation which was issued last week on the basis of findings by the Tariff Commission that rising imports and declining prices are damaging the domestic industry.

The quotas, as soon as they were announced, provoked strong complaints from foreign suppliers of the metals, while domestic interests generally withheld comment.

From Canada came word deploring resort to quotas by this country and stating that the action was "untimely," apparently because the world problem of lead and zinc oversupply presently is under a study which might eventuate in an international agreement limiting production.

Australia also had harsh things to say about the quotas, while Mexico expects the limitation to be felt strongly by the Mexican industry.

In Britain the reaction was mixed but Sir David Eccles, president of the board of trade, called the quotas "a melancholy retreat from the [US] policy of opening free world markets . . ."

Belgian leaders, recognizing that the measure will hurt industry in their coun-

—Continued on page 71

Chemical Materials Advancing Oct. 1

As reported in this and previous issues of OPD, prices on the following chemical process materials are being advanced October 1:

Aluminum chloride, anhyd., ½ cent to 1 cent per pound.

Ammonium nitrate, $5 per ton.

Anhydrous ammonia, $4 per ton.

Aqueous ammonia, $4 per ton.

Blanc fixe, $20 per ton.

Cyclohexanol, 2 cents per pound.

Cylcohexanone, 2 cents per pound.

Denatured alcohol, 5 cents to 8 cents per gallon.

Di-, tripentaerythritol, 4 cents per pound.

Ethyl alcohol, 5 cents per gallon.

Isopropyl alcohol, 5 cents per gallon.

Monopentaerythritol, ½ cent per pound.

Nitrogen solutions, $4 per ton.

Styrene monomer, tech., 5/100 cent per pound.

Army Narrows Down Search for Fungicides

The Army Quartermaster Corps has just gone through a hundred or more fungitoxic compounds in its efforts to prevent mildew on leather. The result is two promising substances: bis(4-nitrophenyl) carbonate and bis (2-chloro-4-nitrophenyl) carbonate.

The materials are inert, colorless, water-insoluble substances that have the unusual property of becoming poisonous to fungi only under mildew-growing conditions.

Current evaluations have disclosed that bis(4-nitrophenyl) carbonate and bis(2-chloro-4-nitrophenyl) carbonate are about as effective as the corresponding nitrophenols; in the tropical room exposure approximately 0.3 percent (by weight)

—Continued on page 35

Tex. Butadiene V. P. Leaves

K. D. Bowen, vice-president and general manager of Texas Butadiene & Chemical Corporation, Houston, Tex., has resigned from that position in order to devote full time to private business. Mr. Bowen joined Texas Butadiene in 1955 as vice-president and general manager.

J. T. Baker and Dow Sign Ion Exchange Resins Pact

J. T. Baker Chemical Company, Phillipsburg, N.J., has concluded an agreement with Dow Chemical Company, Midland, Mich., which provides that all laboratory quantities up to fifty pounds of established "Dowex" ion exchange resins will be sold by Baker through the leading laboratory supply houses which now distribute "Baker Analyzed" reagents and other laboratory chemicals. This will provide quick availability of "Dowex" resins because orders can be serviced rapidly from convenient local stocks.

"Dowex" ion exchange resins are supplied as "Baker Analyzed" reagents, each with the actual lot analysis on the label. Beside the regular Dow description, the J. T. Baker label reports the actual total exchange capacity, moisture content and wet screen analysis. Convenient shelf-size glass bottles with plastic caps are used for packaging.

The Week's Price Changes

Fishmeal, Menhaden Oil, Peanut Oil, Tankage Advanced. Orange Oil, Potassium Iodide, Sandalwood Oil Reduced.

Prices Advanced

Celery seed, French, 1½c. per lb. (p. 61).
Cod oil, ¼c. to ½c. per lb. (p. 64).
Copra, $1 per ton (p. 64).
Corn oil, crude, ¼c. per lb. (p. 64).
Refd., ¼c. per lb.
Cottonseed oil, crude, ¼c. per lb. (p. 64).
Refd., ½c. per lb.
Fenugreek seed, Moroccan, ¼c. per lb. (p. 61).
Fishmeal, $2 per ton (p. 43).
Fishscrap, $2 per ton (p. 43).
Linseed meal, $1 per ton (p. 64).
Menhaden oil, crude, ¼c. per lb. (p. 64).
Paprika, Hungarian, 1c. per lb. (p. 61).
Peanut meal, $2 per ton (p. 64).
Yugoslavian, ½c. per lb.
Peanut oil, crude, ½c. per lb. (p. 64).
Refd., ½c. per lb.
Silver, ¼c. per oz. (p. 30).
Soybean meal, $2 per ton (p. 64).
Soybean oil, crude, ½c. per lb. (p. 64).
Refd., ½c. per lb.
Tankage, New York, 25c. per unit-ton (p. 43).
Chicago, 50c. per unit-ton.
Tin, 2½c. per lb. (p. 30).
Salts 1.3c. to 1.8c. per lb.

Prices Reduced

Cinnamon, Ceylon No. 2, 2c. per lb. (p. 61).
Cloves, Madagascar, ½c. per lb. (p. 61).
Cocoa butter, 4c. per lb. (p. 64).
Cottonseed meal, $1 per ton (p. 64).
Fennel seed, Yugoslav, ½c. per lb. (p. 61).
French, ½c. per lb.
Greases, ½c. per lb. (p. 64).
Mace, Siauw No. 2 whole, 5c. per lb. (p. 61).
No. 2 siftings, 5c. per lb.
Orange oil, Florida, 15c. per lb. (p. 61).
Pepper, Malabar black, ½c. per lb. (p. 61).
Lampong black, ½c. per lb.
Muntok white, 1c. per lb.
Potassium iodide, 3c. per lb. (p. 33).
Potato starch, mills, Maine, ¼c. per lb. (p. 49).
Sandalwood oil, 75c. per lb. (p. 61).
Tallow, inedible, ¼c. per lb. (p. 64).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Sept. 26, 1958	Sept. 19, 1958	Sept. 27, 1957
108.69	108.60	110.30

Starch Seen in Mud, Cosmetics

Starch—that most valuable constituent of corn—may soon be finding its way into a whole new line of products ranging from drilling muds to cosmetics. That's what the Department of Agriculture says about a new starch derivative it has just developed. The versatile material was created at USDA's Northern Utilization Research and Development Division at Peoria, Ill., and is called cross-linked dicarboxyl starch.

One of its potential uses is as a thickening agent in various paste-like products. USDA scientists believe the new starch may prove valuable in the manufacture of paper, paints, textiles, and food products, as well as cosmetics, toiletries, and drilling muds.

Changing Starch's Way

Finding means of chemically treating starch to change the way it responds to water and heat is one aim of USDA research on starch utilization at Peoria. Cross-linked dicarboxyl starch is one of the latest developments in this work.

When ordinary corn starch is dissolved in water and boiled, a thick paste results. When it cools, the starch jells and cannot be poured. This property makes starch unsuited for many industrial uses it could otherwise serve, it was explained.

In some applications it is desirable for starch granules to take up water and

—Continued on page 41

IN RESEARCH POST: Dr. C. L. Randolph, named associate director of chemical research for US Borax Research Corporation, Anaheim, Calif.

Johns-Manville Sets Plan To Merge With Glass Firm

Johns-Manville Corporation, New York, plans to merge with Libby-Owens-Ford Glass Fibers Company, Toledo, Ohio. The proposal must be okayed by stockholders of the fiber glass firm before the agreement can be signed.

According to a spokesman for Johns-Manville, the proposal calls for one share of Manville common stock in exchange for two-and-one-half of the L-O-F Glass Fiber's stock. The latter firm is 50 percent owned by Libby-Owens-Ford Company, Toledo, Ohio.

Polyvinyl Alcohol Cut

Prices of "Vinol CWS (Exp. L-19)," cold water soluble polyvinyl alcohol, have been reduced by Colton Chemical Company, a division of Air Reduction Company, Cleveland, Ohio. Price reductions of "Vinol CWS (Exp. L-19)" are from 15 percent to 25 percent, depending on the quantities ordered.

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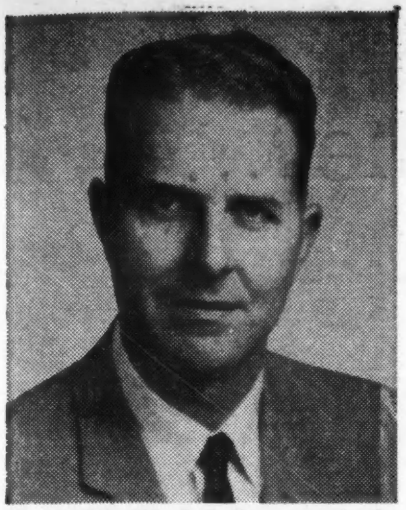

IN SELLING JOB: T. R. Evans, named sales manager for the fine metals and chemicals division of Electro Metallurgical Company, a unit of Union Carbide Corporation, New York.

Glutamine Process Is Developed by Lilly

Glutamine, an amino acid which plays a part in the chemistry of all living cells and which may have important medical uses, has been synthesized by Eli Lilly & Co. through a process developed by one of the company's organic chemists, Dr. G. Bruce Kline.

The process, carried out in the Indianapolis, Ind., company's research laboratories, is expected to spur glutamine research by sharply cutting costs.

Lilly's agricultural and industrial products division is offering dl-glutamine to research and developmental laboratories at less than one-tenth of the current cost of l-glutamine.

In the process developed by Dr. Kline, alpha-ketoglutaric acid was condensed with hydrazine to obtain a cyclic intermediate — 1,4,5,6-tetrahydro-6-oxo-3-pyridazinecarboxylic acid. This was then hydrogenated in the presence of palladium-on-carbon as a catalyst to yield dl-glutamine.

Several substituted glutamines were synthesized by using appropriately substituted hydrazines.

Glutamine is involved in the biosynthesis of other amino acids and of purines.

Scientists have been interested in its possible usefulness in treating epilepsy, mental deficiency, alcoholism and peptic ulcer.

There is evidence that glutamine can serve as a source of energy in respiration of brain and nerve tissue, and that it plays a part in regulating the ammonia level in the brain and blood.

In the pharmaceutical industry, glutamine is used in nutrient media for tissue culture, which is essential in the growth of viruses for research and vaccine production.

Helena Rubinstein Signs Union Dental Care Pact

A New York cosmetics firm and a chemical union have signed the first nonprofit dental insurance plan to be negotiated by labor and management.

The plan, to be administered by Group Health Dental Insurance, Inc., of New York, was included in a contract between Helena Rubinstein, Inc., and Local 14-149 of the Oil, Chemical & Atomic Workers Union, AFL-CIO.

According to Helena Rubinstein, the company will pay the monthly premium of $1.65. Employees can use their own dentists. If the doctor is a participant in the plan, the subscribers income is $5,000 or less, all expenses are covered.

Chemical Business Will Watch Washington as Supreme Court Gets Down to Industry Cases

The chemical industry will be directing its attention towards Washington again in another week for the opening of the fall term of the Supreme Court of the United States. Close to 400 cases already are on the docket for the consideration of the court, raising many questions important to general business and some of immediate concern to the chemical industry itself. These range from proper interpretation of the food, drug and cosmetic law in its regulation of the use of coaltar colors to questions of antitrust law enforcement, trademark rights, and state taxation of incomes of corporations domiciled in another state and engaged solely in interstate business.

From the chemical industry's viewpoint, the outstanding case on the docket is the appeal by the government from the ruling of the US Court of Appeals for the Fifth Circuit in the Florida Citrus Exchange, Frank R. Schell case. The litigation was accepted for argument by the court last March and will be heard early in the new term, probably this month.

Question of HEW Authority

The case raises the question whether the Secretary of the Department of Health, Education and Welfare has the authority, under the drug law, to set tolerances on the amounts of coaltar colors used in coloring oranges. It hinges largely on congressional intent in the 1938 law when it provided that a food may not be considered adulterated because it contains an added poisonous or deleterious substance which is required in the production or which cannot be avoided by good manufacturing practices.

It is the contention of the government that the coaltar color section of the law is not governed by the adulterated food section and that in the case of coaltar colors they can be used only if they are certified to be harmless, regardless of the quantity used. Furthermore, it is argued, the lower court erred in holding that the coloring of oranges was a step necessary in the production.

"Required in production," said the government in its brief to the court, "means chemicals without which oranges cannot be brought to maturity, not post-harvest chemicals to promote salability. The expansive reading of the statute adopted below is contrary to the statute's basic aim to keep to an absolute minimum all poisonous and deleterious substances in our foods."

The brief continued:

"Added poisonous and deleterious substances were banned without regard to whether the added substance might or might not render the treated food injurious. It was enough that the substance was a poisonous one.

"The only exception, for substances re-

—Continued on page 58

Urethane Foam Seen Cutting Building Costs

Urethane foam-insulated and soundproofed sandwich panels that can be fabricated and installed quickly with savings in time and labor may soon be available, Chester M. Brown, vice-president, Allied Chemical Corporation, New York, predicted last week.

At an exhibit of urethane products held at the Waldorf-Astoria hotel, Mr. Brown said Allied Chemical technicians are conducting experiments by pouring or spray-in urethane foam into sandwich building panels. The panels will be mold, mildew and fire-resistant, all at the same time.

Mr. Brown, who is also president of Allied's National Aniline Division, envisions a house prefabricated to the extent that a mass production line turns out panels with a finished outside wall, a finished inside wall, and a layer of rigid urethane foam in between for insulation and structural strength.

CHEMICAL COMPANY BUYER: Robert J. Baker, made purchasing agent for the Niagara Falls, N. Y., plant and the Durez Plastics Division of Hooker Chemical Corporation, Niagara Falls, N. Y.

Ammonium Nitrate Unit Is in Production

American Cyanamid Company's new ammonium nitrate manufacturing plant in New Castle, Pa., began continuous production last week, marking the completion of the company's industrial explosives rebuilding and expansion program which was begun last year.

Dr. William H. Bowman, general manager of the organic chemicals division, said the building program has increased Cyanamid's annual explosives manufacturing capacity by approximately 60 percent.

A substantial portion of the program has consisted of rebuilding and expanding the 535-acre New Castle plant, which is said to be the third largest industrial explosives manufacturing plant in this country.

Ten buildings have been added, including both replaced facilities and new construction. Many new types of equipment, involving new methods and processes have been installed in the area. New buildings erected have included an ammonium ni-

—Continued on page 70

Chesebrough-Pond's to Buy Cosmetic Interests of Vick

Chesebrough-Ponds, Inc., will acquire all cosmetic interests of Vick Chemical Company effective September 30. Terms of the purchase were not disclosed other than that it would be in cash.

Vick, according to a company spokesman, will use the proceeds for future acquisitions. The sale includes "Prince Matchabelli" and "Simonetta" perfumes and cosmetics, "Seaforth" and "Black Watch" men's toiletries and "Softskin" hand creams.

Prince Matchabelli, Inc., will become a wholly-owned subsidiary of Chesebrough-Pond's.

Drug Shippers Seen the Victors Over Air Lines

The drug industry feels confident that it has licked the air lines on the question of closing down air mail to shipments of etiologic agents. While the Post Office has yet to take action on a proposed change in the regulations (OPD, 9/8/58) it is felt now that the department can take no other course but to reject the change.

This feeling has been bolstered by the strong position taken by the Public Health Service, the National Institutes of Health, the American Medical Association and other health groups in opposition to the move. It is reported that the department has been flooded with protests and even some of the airlines themselves are wavering in their advocacy of the change.

Stinging Letter From Burney

Surgeon General Leroy Burney, when apprised of the department's move to shut off the airmail to biologicals at the request of the Air Transport Association, sent a stinging letter of protest to the department, citing the dangers of untold damages to public health that might arise from grounding biological samples.

He warned that the proposed change "would produce a disastrous effect upon current methods of disease control, medical research and even national defense against bacteriological warfare."

He added that the impact of the department's regulation "will adversely affect nearly every practicing physician in the country who seeks help in the identification of disease agents from specialized public health or private diagnostic laboratories at any distance."

Dr. Burney emphasized that rapid air shipment of viruses and bacteria from an epidemic area is vital in determining the cause of the epidemic to insure control measures.

"Medical research relating to these disease agents would be crippled not only in the Public Health Service but in medical institutions and research laboratories like the Rockefeller Institute, Armed Forces Epidemiological Board and state health laboratories throughout the United States," he said.

Dow Opens New Facility For Filling 'Short Orders'

A new semi-commercial plant for the customer who needs production help fast on special organic chemicals has been placed in operation by Dow Chemical Company, Midland, Mich.

The $500,000 unit will provide another means of bridging the time gap between the laboratory bench and full-scale production.

It is intended to meet the needs of the manufacturer who, with critical timing, requires representative commercial quality material for an initial field test or marketing program.

Products and processes selected for development in the facilities will be those regarding which Dow has a basic contribution to make by reason of its raw material position, its research background, or accumulated technology and experience in specialized areas.

A Dow spokesman described the facilities as a versatile collection of unit process equipment capable of rapid conversion to handle a wide range of products and processes. The products include pharmaceutical and food chemicals and aromatic and cosmetic raw materials.

Insecticide Plant's Capacity Doubled

Stauffer Chemical Company, New York, has doubled its capacity to produce "Trithion," the insecticide-miticide developed several years ago.

The first commercial plant to produce "Trithion" was built at Henderson, Nev., and went on stream last April. The new increase in throughput capacity has been effected by the installation of additional reactors at Henderson and the development of process innovations for the manufacture of both the finished product and feedstock intermediates.

Cyanamid Man Debuts This Week as Mystery Writer

This week book reviewers across the nation will be sizing up a new mystery writer, seeing how he shapes up against the likes of Earl Stanley Gardner, Rex Stout, Eric Ambler et. al.

The tyro novelist is a chemical engineer, Edgar H. Bohle, who for the past dozen years has been earning his keep at American Cyanamid Company, New York. The book, to be published by Random House on Friday (October 3), is a tautly-written thriller, entitled *The Man Who Disappeared*.

Mr. Bohle's suspense yarn, likened by the publishers to *The Lady Vanishes*, revolves about Dick Stoddard, head of a research team working at a top-security chemical plant—apparently on a kind of nerve gas.

Stoddard, suffering from a mild case of poisoning, arrives at the plant early one morning and finds there Steve Haklos, one of his associates, alone and sick. Fifteen minutes later Haklos is gone, and no one but Stoddard believes he had ever been there.

When an attempt is made on his life, Stoddard knows he must find Haklos quickly—and that he must do it alone.

His clues: A strain of music whistled by an unseen truckdriver, a packing case that looks like a coffin and a smudge of chalk on a dustcloth.

They lead Stoddard to a fashionable inn in Connecticut to a seemingly abandoned farmhouse and, finally, on a wild Easter Sunday chase in New York.

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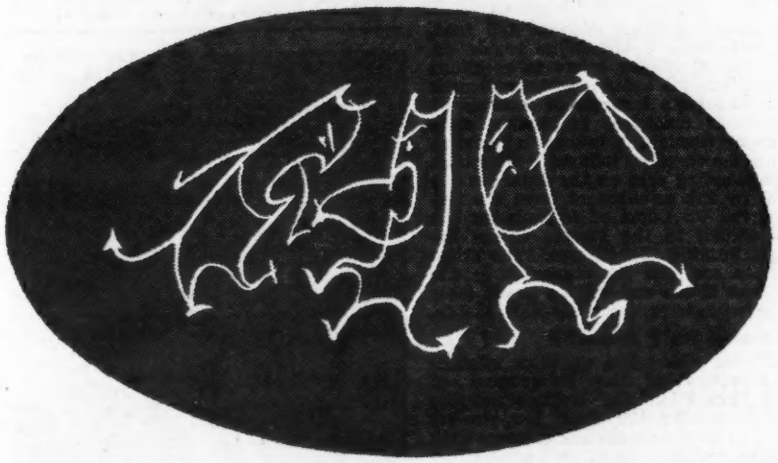
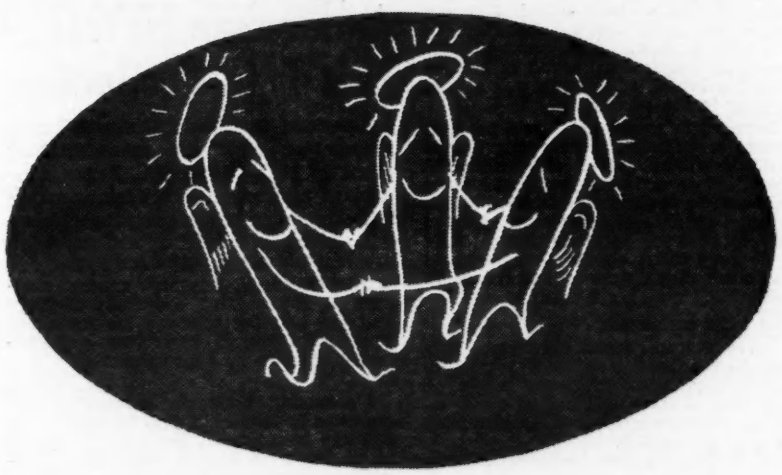
it's a Riot!



But... NYQ DRY VITAMINS
behave like little angels!



Write today for samples of these NYQ DRY VITAMINS!

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DRY VITAMIN D_2
DRY VITAMIN A and D_2
DRY CYANOCOBALAMIN
DRY COBALAMIN CONCENTRATE
DRY VITAMIN E ACETATE 25%
DRY VITAMIN E ACETATE 33%
(Granular and Fine Powder)

NYQ *gelatin*-encapsulated vitamins minimize potency-robbing interreactions among vitamins and other ingredients in your preparations.

You get uniform dispersion so that every tablet contains the proper amount of each vitamin. Loss on extrusion is low, potency is protected and stability is assured for longer shelf-life.

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Very important: the *gelatin* matrix in NYQ dry vitamins doesn't interfere with physiological availability! It's ideal for soluble tablets, too, and won't cause unpleasant after-taste. IDEAL FOR BABY FORMULAE.

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Carbon Black in Clouds

Carbon black, a common product that is ordinarily used in such earthly things as printers' ink and automobile tires, is now finding itself up in the clouds.

It has been placed there by the Naval Weather Service to prove the feasibility of creating and destroying clouds by a "seeding" process—and is working out very well.

The navy announced last week that the experiments were conducted in July under the direction of Dr. Florence W. van Straten, of the weather service, and succeeded in actually creating and destroying cloud formations over the south coast of Georgia.

Dr. van Straten said she chose carbon black as a substance for the test because black objects absorb heat. Much work remains before full effects of carbon black cloud control can be known.

"We have only demonstrated an effect. It has to be studied and proved scientifically. Now we need measurements, analyses and controls," Dr. van Straten said. "Much research is ahead of us."

Carbon black was dropped into the atmosphere from a navy WV-3 Super Constellation. Quantities varied from one-and-a-half-pound dry packages to six pounds suspended in liquid. The carbon particles were about two-millionths of an inch in diameter.

Seven clouds were tackled. The carbon dissipated each of the seven in periods of time varying from two-and-a-half to twenty minutes.

By dispensing the carbon at a different level in the atmosphere, clouds can apparently be created. Carbon was used to produce three single clouds and one line of clouds.

Market Research, Unknown Tool A Quarter of a Century Ago, Now Indispensable, CMRA Told

Twenty-five years ago very few companies knew what marketing research was; today they could not do without it. Such was the information that those attending the meeting of the Chemical Market Research Association brought with them as they left the market research conference in French Lick, Ind., last week. As one executive had put it, "We didn't even have a market research group operating under that name in 1935 and I suspect that many other chemical companies were equally deficient at that time."

The speaker was Dr. Frank E. Dolian, manager of market development for Commercial Solvents Corporation, New York. Dr. Dolian reviewed the market research efforts that his company made in its nitroparaffin development, beginning back in 1935, and added:

"I do firmly believe that we could have used more market research effort although I don't think we've pulled any real 'bloopers' in this area. Market research is, however, an extremely important factor in our forward planning on the NP development.

"Considerable Market Research . . ."

"At present, we are formulating plans for our next expansion, and I can assure you that considerable market research will be involved in our decisions on capacity, timing, choice of products, and choice of application research projects. While we've felt at times that we had an elephant by the tail, we are quite happy with the NP development and expect it to play a big part in the future of CSC," Dr. Dolian concluded.

Dr. Dolian was one of four speakers on a panel entitled, "The Role of Market Research in the Introduction of New Product Lines."

Others were: Dr. R. L. Bateman, director of product development for Union Carbide Chemicals Company, New York, a division of Union Carbide Corporation; Hoyt W. Corley, staff assistant to the vice-president of Armour & Co., Chicago, and Parker Frisselle, manager of the market research department of Dow Chemical Company, Midland, Mich.

Dr. Bateman presented a study on the development of a new product line, using

—*Continued on page 71*

ADVANCED BY INTERCHEMICAL: Kenneth J. Carson, named vice-president and Atlantic district manager of the finishes division of Interchemical Corporation, New York.

Scientific Decision-Making Seen As the Coming Thing for Business

"Scientific decision-making" is still in an early stage of its development, but there is no doubt that it is the coming thing in the making of the business world's big decisions. That prospect became more and more apparent to members of the Chemical Market Research Association as they heard experts in the field discuss "electric brains" at the organization's research conference in French Lick, Ind., last week.

Dr. Werner Z. Hirsch, associate professor of economics at Washington University, looked at the future this way: "It appears that the general climate is becoming increasingly favorable to making decisions on the basis of reliable, up-to-date information and with the help of powerful, more scientific methods."

'Statistical Thinking a Necessity'

Continuing, Dr. Hirsch added, "No doubt H. G. Wells was right when he said, 'Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write.'"

"Today the financial success of industry depends increasingly upon the sophistication of its statistical decision-making process," he concluded.

W. A. Clark, manager of advertising research for Monsanto Chemical Company, St. Louis, Mo., offered a few pointers on when to use a computer. He observed: "It can be said of the machine that

—*Continued on page 71*

METALS EXECUTIVE: Graham B. Brown, appointed vice-president of Mallory-Sharon Metals Corporation, Niles, Ohio, after having been director of marketing.

Can Prices Up November 1

William C. Stolk, president of American Can Company, last week announced that prices of cans will be increased November 1 to reflect the higher prices of tin plate and labor costs.

SOCMA to Hear GAF Head

Synthetic Organic Chemical Manufacturers Association will hear John H. Hilldring, president of General Aniline & Film Corporation, New York, at its October 8th luncheon meeting. Mr. Hilldring will discuss "How the Europeans Currently Feel About the European Common Market." SOCMA will meet as usual at the Roosevelt hotel, New York. Cocktails will be served at noon, with luncheon getting under way at 12:30 p.m.

Boron Has Doubled Output, Is Seen Doubling It Again

"New discoveries stemming from boron research and new products resulting from these discoveries have doubled production of borates in the US within the past ten years," according to J. F. Corkill, vice-president and general manager of United States Borax & Chemical Corporation's Pacific Coast Borax Division.

In a speech at the American Mining Congress in San Francisco, Mr. Corkill predicted that growing demand for boron products will cause production to double again within the next ten years. "Stepped up research in boron chemistry plus a gradual rise in the world standard of living may well bring about increased demand for boron," he said.

Radioactivity in Foods To Interest the AOAC

Has radioactivity increased in foods since the first atomic bomb was dropped in 1945? The Association of Official Agricultural Chemists wants to know, and will try to have the answer for its seventy-second meeting, to be held October 13 to 15 at the Shoreham hotel, Washington, D.C.

To study the question, two scientists from the Food & Drug Administration have tested hundreds of samples of foods—some packed before the first atomic explosion and the rest at other times since.

They collected their specimens from pantries all over the country and from supplies that had been left behind by antarctic explorers.

The FDA men, Drs. Edwin P. Laug and Wendell C. Wallace, will analyze the data to show whether or not radio activity has increased in recent samples.

This will be only one of a number of papers scheduled for presentation. Dr. A. V. Astin, director of the National Bureau of Standards, will discuss the relationship of physical standards to chemical research

—*Continued on page 70*

Association Meetings

American Association of Textile Chemists & Colorists, national convention, Conrad Hilton hotel, Chicago, October 30-November 1.

American Coke & Coal Chemicals Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., October 20-21.

American Council of Independent Laboratories, annual meeting, Atlanta, Ga., October 29-November 1.

American Oil Chemists' Society, fall meeting, Sherman hotel, Chicago, October 20-22.

Antibiotics Annual Symposium, sponsored by the antibiotics division of Food and Drug Administration, Washington, D. C., October 15-17.

Association of American Feed Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 15-16.

Association of American Fertilizer Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 17.

Association of American Pesticide Control Officials, annual meeting, Shoreham hotel, Washington, D. C., October 18.

Association of Consulting Chemists & Chemical Engineers, annual meeting, Biltmore hotel, New York, October 28.

Association of Official Agricultural Chemists, annual meeting, Shoreham hotel, Washington, D. C., October 13-15.

Chemical Industry Association, dinner meeting, Brass Rail Restaurant, New York, September 29.

Chemical Market Research Association, adhesives meeting, St. Paul hotel, St. Paul, Minn., November 12-13.

Chemical Section of 1958 National Safety Congress, LaSalle hotel, Chicago, October 20-23.

Chemical Specialties Manufacturers Association, annual meeting, Commodore hotel, New York, December 8-10.

Commercial Chemical Development Association, joint meeting with National Agricultural Chemicals Association, Lord Baltimore hotel, Baltimore, Md., and Beltsville, Md., November 20-21.

Drug, Chemical & Allied Trades section of the Young Men's Board of Trade, annual Young Man of the Year award dinner, Park-Sheraton hotel, New York, October 16.

Electrochemical Society, 114th meeting, Chateau Laurier, Ottawa, Canada, September 28-October 2.

Federation of Paint & Varnish Production Clubs, annual convention and show, Cleveland Public Auditorium, Cleveland, Ohio. October 5-8.

Manufacturing Chemists' Association, semi-annual meeting and winter conference, Statler hotel, New York, November 25.

National Agricultural Chemicals Association, annual meeting, General Oglethorpe hotel, Savannah, Ga., October 29-31.

National Association of Retail Druggists, annual meeting, Convention Hall, Philadelphia, September 28-October 2.

National Conference on Air Pollution, Sheraton-Park hotel, Washington, D. C., November 18-20.

National Paint, Varnish & Lacquer Association, annual convention, Shoreham and Sheraton-Park hotels, Washington, D. C., October 27-29.

National Plant Food Institute, conference on chemical control problems, Shoreham hotel, Washington, D. C., October 16.

National Plastics Exposition, sponsored by Society of Plastics Industry, International Amphitheatre, Chicago, November 17-21.

National Wholesale Druggists Association, annual meeting, Americana hotel, Bal Harbour, Fla., November 8-13.

Parenteral Drug Association, annual meeting, Statler hotel, New York, October 22-24.

Pharmaceutical Manufacturers Association, midyear meeting, Waldorf-Astoria hotel, New York, December 8-10.

Salesmen's Association of the American Chemical Industry, chemical sales clinic, Roosevelt hotel, New York, October 20.

Society of Plastics Industry, annual national conference, Morrison hotel, Chicago, November 17-21.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, October 8.

Why you should use

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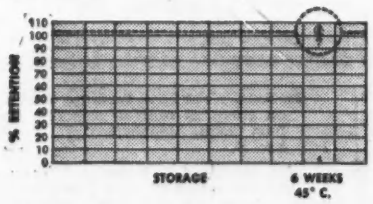
ROCHE VITAMIN B_2

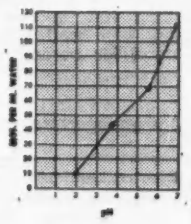
With the varied requirements for vitamin products in mind, Roche has developed three types of riboflavin to meet your formulating needs. As with all Roche vitamins, there are good reasons why you should specify riboflavin *Roche*. These again prove the wisdom of our statement: "It pays to stay with the leader."

A. THREE TYPES. Roche makes three types of riboflavin, each of which has special advantages for pharmaceutical manufacturers.

- **RIBOFLAVIN ROCHE—REGULAR.** Especially useful for powdered dietary supplements, pharmaceutical tablets, soft gelatin capsules and dry enrichment premixes.
- **RIBOFLAVIN ROCHE—SOLUTIONS TYPE.** For use in parenteral solutions which approach or slightly exceed the maximum solubility of B_2. Less likely to crystallize out.
- **RIBOFLAVIN-5'-PHOSPHATE SODIUM ROCHE.** An original Roche development. Preferred for all solutions because it is rapidly and highly soluble. Better taste . . . no bitter after taste. Eliminates need for solubilizers. Specially valuable for highly concentrated oral and parenteral multivitamin solutions (with or without ascorbic acid), elixirs, syrups, water dispersible multivitamin formulations in capsules, tablets, lozenges. Theoretical B_2 content: 73%. Roche product: 70-73%.



STABILITY in B-complex parenteral solutions with or without vitamin C.



SOLUBILITY in water at different pH levels; room temperature.

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C. UNIFORMITY IN COLOR. Uniform color of each type is maintained in Roche manufacturing.

D. STEADY SUPPLY. Roche makes vitamins, including riboflavin, by the tons. You are sure of steady supplies.

E. QUICK DELIVERY. Every order receives prompt, careful service from convenient points. Transportation at lowest rate allowed and prepaid to destination. Special routings at cost.

F. PACKAGING. Packed in polyethylene bags in ½ and 1 kilo tamper-pruf metal containers and in fibre drums up to 20 kilos. Small quantities in amber s.c. glass bottles.

G. LEADERSHIP. Because of its position as a world-leader in research and production of vitamins you can rely on Roche.

H. NEED SAMPLES? Ask your Roche salesman or write the Vitamin Division for samples and technical literature.

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CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, Sept. 26 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns. .....lb. 3.60 - 4.25
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works..lb. .40 - —
Above 92.5 C. m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works. lb. .12 - —
dms., l.c.l., works.....lb. .13½- —
tanks, works.....lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .32½- —
bbls., bgs., ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld..lb. .36½- —
USP, bbls., 225-lb. dms. any quantity..lb. .79 - —
100-lb. dms., any quantity..lb. .81 - —
Acetic acid, coml. or redist., 28%, bbls..100 lbs. 4.80 - —
56%, bbls. .....100 lbs. 8.25 - —
70%, bbls. .....100 lbs. 9.95 - —
80%, bbls. .....100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd..100 lbs.22.00 -23.00
tech., dms., c.l., dlvd. ...100 lbs.13.75 - —
dms., l.c.l., dlvd. .....100 lbs.14.25 - —
tanks, dlvd. .....100 lbs.10.00 - —
USP, cbys., dlvd.....100 lbs.31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E..lb. .16½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .17½- —
tanks, dlvd. E. .....lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd..lb. .80 - —
fib. dms., l.c.l., dlvd. .....lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd..lb. 1.35 - —
fib. dms., l.c.l., dlvd. .....lb. 1.38 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd..lb. .82 - —
fib. dms., l.c.l., dlvd. .....lb. .83 - —
Acetone, CP, dms., c.l., dlvd. ..lb. .11 - —
dms., l.c.l., dlvd. .....lb. .12 - —
tanks, dlvd. .....lb. .08½- —
Acetonitrile, dms., c.l., works....lb. .45 - —
dms., l.c.l., works.....lb. .45¾- —
Acetophenetidin, USP, dms., works, frt. equald..lb. 1.22 - 1.24
Acetophenone, cns., dms. .....lb. .42 - 1.30
tech., dms., c.l., works.....lb. .37 - —
dms., l.c.l., works.....lb. .37¾- —
tanks, works.....lb. .35 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted..lb. 1.75 - 1.85
Acetylene black, imp., bgs., c.l., duty and freight extra..lb. .19 - —
cs., l.c.l., ex whse. .....lb. .24½- .30
Acetylsalicylic acid, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt..lb. .63½- —
USP, standard, fine, cryst. gran., (30-40 mesh) powd., (80 mesh), bbls., 1,000-lb. lots, same basis..lb. .58½- —
Freight equald. shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver..lb. .35½- —
non-ret. dms., l.c.l., frt alld. E. of Denver..lb. .36½- —
tanks, frt. alld. E. of Denver. lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver..lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver..lb. .40½- —
tanks, frt. alld. E. of Denver..lb. .37 - —

Acids

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Acronite root, bls. .....lb. .50 - .55
Acrolein, tech. dms., c.l., works..lb. .47 - —
dms., l.c.l., works.....lb. .47½- —
tanks, works.....lb. .46 - —
Acrylonitrile, dms., c.l., t.l., frt. equald..lb. .30 - —
dms., l.c.l., l.t.l., frt. equald....lb. .31 - —
tanks, frt. equald.....lb. .27 - —
Adeps lanae (see lanolin).

Abies Siberica Oil—Ammonium Bicarbonate

Adipic acid, bgs., c.l., dlvd. .....lb. .32¼- —
bgs., l.c.l., dlvd. .....lb. .35 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 1.90 - 2.00
powd., 30 mesh., fib., dms..lb. 2.50 - —
dl-Alanine, dms., works.....lb. 8.50 -11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms. .....lb. .65 - .85
Albumin, egg, edible, cryst., powd., bbls..lb. 1.09 - 1.11
flake, bbls. .....lb. 1.05 - 1.07
tech., cryst., bbls. .....lb. 1.08 - 1.10
Aldol, 95%, dms., works.....lb. .23 - —
Denaturing grade, dms. .....gal. 2.15 - —

Alcohols

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aldrin, tech., fib. dms., c.l., t.l., dlvd..lb. .93 - —
fib. dms., l.c.l., dlvd .....lb. .98 - —
Aletris root, bgs. .....lb. 1.75 - 1.85
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies.....lb. 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls., same basis. lb. 1.35 - —
Alkali blue prices 1c. higher W. of Rockies.
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld..lb. 6.50 - 6.53
2½% dms. frt. alld. .....lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l., dlvd. ....lb. .32½- —
dms., l.c.l., dlvd. .....lb. .33½- —
tanks, dlvd. .....lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., frt. alld..lb. 6.50 - 6.53
55-lb. cbys., 55 to 990 lbs. works. lb. 1.52 - —
Allyl chloride, dms., c.l., dlvd. ..lb. .17½- —
dms., l.c.l., dlvd. .....lb. .18½- —
tanks, dlvd. .....lb. .15 - —
Allyl isocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde).
Almond oil, nat., bitter, f.p.a., bots. lb. 2.75 - 3.45
NF, bots. .....lb. 3.00 - 3.30
USP, sweet, cns., dms. .....lb. .90 - 1.40
Aloe, Cape, cs. .....lb. .50 - —
powd., cs. .....lb. .75 - —
Curacao, kgs. .....lb. .60 - —
powd., kgs. .....lb. .80 - —
Aloin, USP, bbls., dms., kgs. ....lb. 3.25 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene)
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works..100 lbs. 4.30 - —
lump, dms., works.....100 lbs. 5.05 - —
powd., dms., works.....100 lbs. 5.20 - —
USP, burnt, dms. .....lb. .20 - .21
hydrous, dms. .....lb. .07¾- .08
Alum, potassium, gran., bgs., works. 100 lbs. 4.55 - —
lump, dms., works.....100-lbs. 5.30 - —
powd., dms., works.....100 lbs. 5.45 - —
USP, burnt., dms. .....lb. .20 - .21
hydrous, dms. .....lb. .07¾- .08
Alum, potash-chrome, dms. .....lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .05 - —
bgs., l.c.l., works .....lb. .05¼- .08
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald. lb. .15 - —
dms., l.c.l., works .....lb. .15½- —
cryst., dms., c.l. works..100 lbs.21.00 - —
dms., l.c.l., works ....100 lbs.21.50 - —
soln., 32°, cybs., c.l., works..lb. .0495- —
cbys., l.c.l., works .....lb. .0555- .1325
tanks, works .....100 lbs. 3.45 - —
NF, gran., dms., works.....lb. .31 - .32
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .17¼- —
bgs., l.c.l., works .....lb. .18¼- .20¼
Aluminum fluoride in fib. dms. 0.35c. per lb. higher
Aluminum formate, basic soln., dms., c.l., works lb. .12 - —
dms., l.c.l., works .....lb. .12½- —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .03½- —
bgs., 20,000-40,000 lb. lots, same basis lb. .03¾- —
bgs., 2,000-20,000 lb. lots, same basis lb. .04¾- —
bulk, c.l., same basis .....lb. .03¼- —
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
9-9½% Al_2O_3, fib. dms., works lb. .19 - —
fib. dms., contract, works.lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2380- —
pigs, 10,000-lb. lots, frt. alld lb. .2470- —
Aluminum oxide, amorphous (See Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .69½- —
Standard grade, dms. .....lb. .47 - —
Aluminum powder, lining, extra-fine, dms..lb. 1.11 - —
Standard grade, dms. .....lb. .81 - —

Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Aluminum resinate, precip., 2.1% t.t.l., dms lb. .36¼- —
Aluminum stearate, dibasic, ctns., c.l. lb. .39 - —
ctns., l.c.l. .....lb. .40 - .44
Monobasic, ctns., c.l. .....lb. .39 - —
ctns., l.c.l. .....lb. .40 - .44
Tribasic, ctns., c.l. .....lb. .39 - —
ctns., l.c.l. .....lb. .40 - .44
Aluminum sulfate, coml., grd., bgs., c.l., works, frt. equald. ton.41.00 - —
grd., bulk, c.l., same basis..ton.40.00 - —
lump, bgs., c.l., same basis..ton.44.00 - —
Coml., iron-free, bgs., c.l., works, frt. equald. 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., dms., works .....lb. .30 - —
powd., dms., works .....lb. .37 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots .....oz. 6.50 -10.00
p-Aminoacetanilide, frt. alld..lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works .lb. 1.72 - —
Aminoethyl ethanolamine, dms., c.l., dlvd. lb. .475 - —
dms., l.c.l., dlvd. .....lb. .485 - —
tanks, dlvd. .....lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld..lb. .44 - —
dms., l.c.l., frt. alld. .....lb. .45 - —
tanks, frt. alld. .....lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. .....lb. 2.50 - —
p-Aminophenol, dms., frt. alld. ..lb. 1.15 - —
Aminophylline, USP, 100-lb. dms..lb. 3.55 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted..lb. 3.70 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald...ton.89.00 - —
refrigeration, tanks, works, frt. equald ..ton.82.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis ton.83.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l., works, frt. equald..100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works..ton.324.50 - —
dms., ton lots, ex whse..ton.407.50 - —
dms., smaller lots, ex whse..ton.412.50 - —
Ammonium bicarbonate, dom., dms., c.l., works..100 lbs. 7.00 - —
dms., l.c.l., works.....100 lbs. 9.00 - —

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
		e.p.	end point	Pac.	Pacific
a.p.a.	available phosphoric acid	equald.	equalized	pf.	proof
		exp.	expressed	phos.	phosphate
approx.	approximately	Ext.	external	photo.	photographic
artif.	artificial	F.	fahrenheit	pkgs.	packages
ASTM	American Society for Testing Materials	ferment.	fermentation	powd.	powdered
		f.f.a.	free fatty acid	precip.	precipitated
		f.f.c.	free from chlorine	prod.	producer
		fib.	fiber	pt.	point
Atl.	Atlantic	f.o.b.	free on board	pulv.	pulverized
Be.	Baume	f.p.a.	free of prussic acid	purif.	purified
bbls.	barrels	frt.	freight	redist.	redistilled
bgs.	bags	gal.	gallon	refd.	refined
bls.	bales	gran.	granular	refy.	refinery
bots.	bottles	grd.	ground	reg.	regular
b.p.	boiling point	i.&a.	iron and aluminum	resub.	resublimed
b.p.l.	bone phosphate of lime			ret.	returnable
		i.b.p.	initial boiling point	SD	specially denatured
b.r.	boiling range	imp.	imported	s.d.	single distilled
bxs.	boxes	incl.	included	S E.	southeast
C.	centigrade	indust.	industrial	sec.	secondary
cbys.	carboys	kgs.	kegs	secs.	seconds
CD	completely denatured	l-	laevo	s.g.	specific gravity
		lacq.	lacquer	shipt.	shipment
c.i.f.	cost, insurance, freight	lb.	pound	soln.	solution
cks.	casks	l.c.l.	less than carlots	s.u.	standard unit
c.l.	carlots	l.t.l.	less truckload	syn.	synthetic
cns.	cans	liq.	liquid	tanks.	railroad tankcars
coml.	commercial	mfrs.	manufacturers	tech.	technical
conc.	concentrated	m-	meta	tert-	tertiary
CP	chemically pure	m.a.p.	mixed aniline point	t.l.	truck loads
cps.	centipoises			t.w.	tank wagons
cryst.	crystalline	min.	minimum	USP	U. S. Pharmacopoeia
cs.	cases	m.p.	melting point		
ctns.	cartons	N-	nitrogen	vis.	viscosity
cyls.	cylinders	n-	normal	VM&P	varnish makers & painters
d-	dextro	nat.	natural		
dbl.	double	neut.	neutral	W.	west
denat.	denatured	NF	National Formulary	whse.	warehouse
dest-dist.	destructively—distilled	NNR	New and Nonofficial Remedies	w w.	water-white
dl-	dextrolaevo				
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Ammonium bichromate, dms., works, lb. .42 - .43
Ammonium bifluoride, dms., dlvd lb. .2145- .2245
Ammonium bromide, NF, gran., bbls. lb. .45 - —
Powdered ammonium bromide 10c. per lb. higher.
Ammonium carbonate, USP, lump, dms., c.l. lb. .15½- —
Ammonium chloride, tech., fine gran., bgs., c.l., works 100 lbs. 5.75 - —
bgs., l.c.l., works 100 lbs. 7.75 - 8.20
USP, gran., fib. dms. lb. .17¼- —
Ammonium citrate, dibasic, bbls. lb. .77 - —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonium bifluoride).
Ammonium gluconate, tech., dms. lb. .45 - —
Ammonium hydroxide (see Ammonia aqueous).
Ammonium Iodide, NF, dms., bots. lb. 4.26 - 4.38
Ammonium lauryl, sulfate, dms., c.l., frt. alld. lb. .19 - —
dms., l.c.l., frt. alld. lb. .20 - —
tanks, frt. alld. lb. .18 - —
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., fib. dms., 15,000 lbs., works lb. 1.22 - —
fib. dms., 2,000-lb. contracts, works lb. 1.23 - —
single fib. dms., works lb. 1.24 - —

Ammonium nitrate, dom., fertilizer grade, 33.5% N bags., f.o.b. works ton. 60.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 ton, base price ton. 72.00 - —
western, bgs, c.l., f.o.b. cars, Los Angeles ton. 79.69 - —
with dolomite, 20.5% N, bgs., Hopewell, Va. ton. 49.75 - —
Ammonium oxalate, tech., fine gran., powd., dms. lb. .28½- .34½
Ammonium pentaborate, gran., bgs., c.l., works ton. 193.00 - —
bgs., ton lots, ex whse. ton. 284.50 - —
bgs., smaller lots, ex whse. ton. 289.50 - —
Ammonium pentaborate powder $10 per ton higher.
Ammonium persulfate, tech., dms., 10-ton lots or more, works, lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Ammonium phosphate dibasic, NF, V bbls. dms. lb. .46 - —
Tech., bgs., c.l., works, frt. equald, lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Ammonium silicofluoride, dms., works lb. .11¾- .13¼
Ammonium sulfamate bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works lb. .20½- .27

Ammonium sulfate, coke-oven, bulk, producing ovens, base price ton. 32.00 - —
purif., dms., works lb. .10 - .10½
Syn., bulk., c.l., works ton. 35.00 - —
bgs., c.l., works ton. 40.00 - —
Ammonium sulfate, tech., bulk, c.l., t.l., works ton. 52.00 - —
bgs., c.l., t.l., works ton. 56.00 - —
bgs., l.c.l., l.t.l., works—100 lbs. 3.20 - 7.20
Ammonium sulfide, liq., 40-44%, tanks, frt., equald., 100% basis ton. 160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms. c.l. works lb. .20 - —
dms., l.c.l., works lb. .22 - .26
tech., soln, 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycollate, coml., cbys., 100% basis lb. 1.35 - 1.65
Highly purif., cbys. 100% basis. lb. 1.70 - 1.96
d-Amphetamine hydrochloride, di-basic, bots. lb. 18.00 -28.00
dl-Amphetamine hydrochloride, di-basic, bots lb. 4.50 - 6.00
d-Amphetamine hydrochloride, mono-basic, dms. lb. 17.50 -21.00
d-Amphetamine phosphate, fib. dms., 100-lb. lots lb. 15.00 - —
dl-Amphetamine phosphate, dms. lb. 4.20 - 5.00
d-Amphetamine sulfate, fib. dms., 100-lb. lots lb. 15.00 - —
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.00

Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies lb. .18½- .19
dms., l.c.l., same basis lb. .19½- .20
tanks, same basis lb. .16 - .16½

Amyl acetate, ex pentane, reg. dms., c.l., dlvd lb. .19 - —
dms., l.c.l., dlvd. lb. .20 - —
tanks, dlvd. lb. .16½- —
Syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd. lb. .20 - —
tanks, dlvd. lb. .16½- —
Tech., dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. lb. .18 - —
tanks, dlvd. lb. .14½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd.).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43 - —
refd., ACS grade, dms., l.c.l., dlvd lb. .45 - —
Amyl alcohol, ex pentane, mixed, amyls, dms., c.l., frt. alld. lb. .18½- —
dms., l.c.l., frt. alld. lb. .19½- —
tanks, frt. alld. lb. .16 - —
primary, dms., c.l., frt. alld. lb. .20¼- —
dms., l.c.l., frt. alld. lb. .21¼- —
tanks, frt. alld. lb. .17¾- —
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., works lb. .20 - —
tanks, works. lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .18½- —
dms., l.c.l., frt. alld. E lb. .19½- —
tanks, frt. alld. E lb. .16 - —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .42½- —
tanks, works lb. .39½- —
Amyl alcohol, 2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb. 1.75 - 2.20
o-tert Amyl phenol, dms., c.l., works. lb. .49½- —
dms., l.c.l., works lb. .50½- —
tanks, works lb. .47 - —
p-tert Amyl phenol, dms., c.l., works. lb. .26¾- —
dms., l.c.l., works lb. .27¾- —
Amyl salicylate, cns., dms. lb. .80 - 1.10
Amyris oil, dms. lb. 1.30 - 1.75
Anethole, USP, cns., dms lb. 1.25 - 1.70
Tech., dms. lb. .85 - .90
Angelica root oil, bots lb. 120.00 -140.00
Angelica root oil, bots. lb. 120.00 -130.00
Angelica seed oil, bots. lb. 120.00 -130.00
Aniline, dms., c.l., frt. alld. lb. .20 - —
dms., l.c.l., frt. alld. lb. .21 - —
tanks, frt. alld. lb. .18 - —
Aniline oil (see Aniline).
Anilina salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld. lb. .33 - —
dms., l.c.l., same basis lb. .35 - —
Anise oil, USP, dms. lb. 2.00 - 4.05
Anise seed, Mexican, bgs. lb. .17½- —
Spanish, bgs. lb. .17½- —
Anisic aldehyde, dms. lb. 1.85 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l., f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5%, bbls., c.l., frt. alld lb. .83 - —
bbls., l.c.l., same basis lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 - —
cs., c.l., mines lb. .29½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .24½- —
bgs., l.c.l., frt. alld. lb. .26 - —
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb. dms. lb. .69½- —
USP, powd., 250-lb. dms. lb. .74½- —
Antipyrine, NF, 200-lb. bbls lb. 3.50 - —
Apomorphine hydrochloride, USP, 25-oz. lots oz. 35.60 - —
Apricot kernel oil, USP, dms. lb. .85 - 1.25
Arabic gum, amber sorts, bgs. lb. .21 - .23
USP, powd., bbls. lb. .26 - .29
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins oz. 4.50 - 6.00
l-Arginine, free base, dms., 10-kilo lots or more kilo. 90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo. 60.00 - —
l-Argenine monochloride, dms., 10-kilo lots or more kilo. 60.00 - —
Arnica flowers (true Montana), bls. lb. 1.40 - 1.50
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, USP, dms. lb. .48 - —
Arsenic white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works lb. .06½- .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons deep shades, bbls. lb. 3.70 - —
Light shades, bbls. lb. 2.85 - —
Maroon shade, bbls. lb. 3.70 - —
Asafetida gum, cns. lb. .40 - —
Powd. bbls., dms. lb. .85 - —
Asbestine (see Talc fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons) mines ton. 86.00 - —
7D, c.l. (30 tons) mines ton. 75.00 - —
7F, c.l. (30 tons) mines ton. 71.00 - —
7H, c.l. (30 tons) mines ton. 61.00 - —
7K, c.l. (30 tons) mines ton. 50.00 - —
7M, c.l. (30 tons) mines ton. 44.00 - —
7R, c.l. (30 tons) mines ton. 43.00 - —
7RF, c.l. (30 tons) mines ton. 44.00 - —
7T, c.l. (30 tons) mines ton. 41.00 - —
7TF, c.l. (30 tons) mines ton. 44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP dms., 25-100 kilo lots kilo. 10.00 - —
dms., 10-kilo lots kilo. 10.35 - —
dms., 5-kilo lots kilo. 10.75 - —
bots., 1-kilo lots kilo. 12.00 - —
bots., 500-gram bots. kilo. 12.50 - —
Ash black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton. 40.00 - —
ex-whse, N. Y., N. J. ton. 86.50 - —
seconds, 300°-390°F, fusing pt., bgs., c.l., mines ton. 35.00 - —
select, 350°F, fusing pt., bgs., c.l., mines ton. 41.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton. 40.00 - —
Asphalt, manjak No. 10 crude, dms., works lb. .07 - —
Asphalt, petroleum, cut-back, tanks, tankwagon, refy. gal. .09 - —
emulsion tanks tankwagon, refy. gal. .09½- —

Smart Birds depend on Publicker!

For Uniform Quality—Steady Supply—Prompt Delivery

★ Ethyl Alcohol ★ Ethyl Acetate ★ Acetone
★ Butyl Alcohol ★ Amyl Acetate ★ Acetic Acid
★ Butyl Acetate ★ Refined Fusel Oil

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Evaluate all the advantages of
NATIONAL ADIPIC ACID

If you use or contemplate using Adipic Acid in elastomers, plastics, plasticizers, synthetic lubricants or as a chemical intermediate, we urge you to get a working sample and quotation from National Aniline.

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Asphalt—BON Acid Maroons

Asphalt, petroleum, steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton.21.00 - —
85-300 penetration tanks, tankwagon, refy. ton.20.00 - —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins .....oz. 5.75 - 6.50
Atropine sulfate, USP bots. .....oz. 5.00 - 5.50
Avocado oil, f.o.b. Calif., cns. ..lb. 2.25 - —

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs. .lb. 1.25 - 1.35
Barberry root bark, bgs. .....lb. .28 - .30
Barbital, NF, 100-lb. dms. .....lb. 4.50 - —
Barbital sodium, NF, dms. .....lb. 4.75 - —
Barium carbonate precip. bgs., c.l., works. .ton.111.50 - —
bgs., smaller lots, works. .ton.126.50 - —
Barium chlorate, dms., works. .lb. .32 - .41
Barium chloride anhyd. bgs., c.l., works. .ton.176.00 - —
bgs., l.c.l., works. .ton.196.00 - —
Barium chloride, NF, cryst., 100 lb. dms. .lb. .22 - —
Tech., cryst., bgs., c.l., works. 100 lbs. 7.00 - —
bgs., l.c.l., works.....100 lbs. 8.00 - —
Barium chromate, bgs. frt. equald.lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald. ton.208.00 - —
bgs., l.c.l., l.t.l., frt. equald. .ton.216.00 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd. lb. .16 - —
bbls., l.c.l., l.t.l., dlvd. .....lb. .17 - —
Barium oxide grd., dms., c.l., t.l., frt equald .ton.275.00 - —
dms., l.c.l., l.t.l., frt. equald .ton.285.00 - —
Barium peroxide dms. frt. equald lb. .20 - —
Barium stearate, ctns. c.l., frt. alld. lb. .41 - —
ctns., l.c.l., same basis.....lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, dms. ....lb. .15 - .15½
Barium sulfide, dms., c.l., works. ton.100.00 - —
dms., l.c.l., works.....ton.110.00 - —
Barytes, southern, off-color, bgs., mines. .ton.25.00 - —
95-75%, bgs., mines .....ton.25.00 - —
white, water-grd., paper bgs., c.l., St. Louis. .ton.55.00 -55.25
paper bgs., ex whse., New York. .ton.79.85 - —
Battery acid cbys, c.l. works, E. 100 lbs. 2.35 - —
cbys., l.c.l., works, E.....100 lbs. 2.65 -10.95
Bauxite bulk, mines..... ton. 7.00 -10.00
Bay oil, NF, Puerto Rican, 50-55%, cns. .lb. 2.10 - 3.05
55-60%, cns. .....lb. 2.50 - 3.05
West Indian, 50-55% cns. dms., lb. 2.30 - 3.00
Bayberry wax, bgs. .....lb. .45 - .47
Beeswax, crude, African, bgs....lb. .56 - .58
Brazilian, bgs. .....lb. .67 Nom.
Central American, bgs. .....lb. .60 Nom.
Chilean bgs. .....lb. .67 Nom.
Refd., USP, bleached, white, bricks, 100-lb. ctns....lb. .72 - .73
white, slabs, 100-lb. ctns....lb. .71 - .72
yellow, bricks, 100-lb. ctns..lb. .63 - .65
yellow, slabs, 100-lb. ctns....lb. .62 - .64
Belladonna leaf, bls. .....lb. .30 - —
Belladonna root, bls. .....lb. .30 - —
Bentonite, dom. 200 mesh, bgs., c.l., mines. .ton.14.00 - —
Imp. Italian, white high gel. bgs., 5-ton lots, ex whse .ton.91.00 - —
bgs., 1-ton lots, ex whse. .ton.94.00 - —
low gel. bgs., 5-ton lots ex whse. .ton.89.35 - —
bgs., 1-ton lots, ex whse. .ton.92.35 - —
Benzal chloride, cbys., works. .lb. .44 - —
Benzaldehyde, NF, dms. .....lb. .80 - .86
Tech., cbys. dms., t.l. .....lb. .43 - —
cbys. smaller lots .....lb. .44 - —
Benzene, coaltar, pure or nitration, tanks, works:
Bethlehem, Pa. .....gal. .31 - —
Birmingham district ....gal. .31 - —
Chicago district .....gal. .31 - —
Cleveland district .....gal. .31 - —
Geneva, Utah .....gal. .31 - —
Johnstown, Pa. .....gal. .31 - —
Lackawanna, N. Y. ....gal. .31 - —
Lone Star, Tex. .....gal. .31 - —
Lorain, Ohio .....gal. .31 - —
Middletown, Ohio .....gal. .31 - —
Minnequa, Colo. .....gal. .31 - —
Philadelphia district ....gal. .31 - —
Pittsburgh district .....lb. .31 - —
Sparrows Point, Md. ..gal. .31 - —
Syracuse, N. Y. .....gal. .31 - —
Terre Haute, Ind. .....gal. .31 - —
Youngstown, Ohio.....gal. .31 - —
Benzene, petroleum, nitration or industrial, Houston, Tex., tanks, gal. .31 - —
Benzene hexachloride 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride tech. high gamme, dms., c.l. dlvd. gamma unit-lb. .00825- —
dms., l.c.l., works gamma unit-lb. .009 - .0095
low gamma, dms., c.l. dlvd. gamma unit-lb. .00825- —
dms., l.c.l., works gamma unit-lb. .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis. .lb. 1.19 - —
bbls., l.c.l., same basis .....lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls. dlvd. lb. 2.30 - —
AAOT, bbls., dlvd. .....lb. 2.55 - —
Lightfast, bbls., dlvd. .....lb. 3.40 - —
Benzocaine, dms. .....lb. 3.48 - 3.50
Benzoic acid, tech., bbls., dms., c.l., t.l., frt., alld lb. .37 - —
bbls., dms., ton lots, same basis lb. .41 - —
bbls., dms., 1,000-lb. lots, same basis. .lb. .43 - —
USP, bbls., dms., ton lots .....lb. .48 - —
bbls., dms., 1,000-lb. lots....lb. .50 - —
Benzoin gum, Sumatra, cs. .....lb. .33 - —

Benzol

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzophenone, dms. .....lb. 1.40 - 1.70
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt., equald. .lb. .21 - —
cbys, smaller lots, frt., equald. .lb. .23 - —
Benzoyl chloride, cbys., dms., c.l., works, frt., equald. .lb. .22 - —
cbys., l.c.l., same basis.....lb. .23 - —
tanktrucks, dlvd., Metropolitan area, lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 30 to 1,000-lb. lots, works. .lb. .98 - 1.08
Benzyl acetate, f.f.c., cns., dms. .lb. .58 - .79
Benzyl alcohol, NF, dms. ..... lb. .58 - .80
Tech., dms., dlvd. ..... lb. 47½- .65
Benzyl benzoate, USP, NF, 40-lb. dms. .lb. .68 - —
Benzyl chloride, tech., cbys., dms., c.l., works, frt., equald .lb. .22½- .25½
cbys., dms., l.c.l., same basis .lb. 23½- 25½
tanktrucks, dlvd., Metropolitan area .lb. .21 - —
A 2½c. differential is quoted on benzyl chloride in 5-gal cbys. In steel dms. prices are ½c. lower.
Benzyl cinnamate, cns. .....lb. 3.30 - 3.60
Benzyl dimethylamine, dms., works. lb. 2.25 - —
Benzyl formate, cns. .....lb. 1.85 - 2.10
Benzyl isoeugenol, cns. .....lb. 9.85 - —
Benzyl propionate, bots. .....lb. 1.35 - 1.65
Benzyl salicylate, bots. .....lb. 1.60 - 1.85
Benzylidine acetone, bots. .....lb. 1.75 - 1.80
Benzylidine chloride. (see Benzal chloride).
Berberine bisulfate, cns. .....lb.35.00 -36.25
Berberine hydrochloride, bots. ....lb.35.00 -36.25
Bergamot oil, nat. NF Italian cns. lb.12.75 -14.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid)
Betamethylnaphthalene (see b-Methylnaphthalene).
Betanaphthol (see b-Naphthol)
Betanaphthylamine (see b-Naphthylamine)
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin, cryst., bots. .....gram.10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns. .....lb. 1.50 - 1.90
Rectified, cns. .....lb. 1.75 - 1.85
Bismuth chloride, jars .....lb. 5.11 - —
Bismuth hydroxide, dms. .....lb. 4.60 - 4.65
Bismuth metal, bxs., ton lots....lb. 2.25 - —
Bismuth nitrate, cryst., dms. ....lb. 2.08 - 2.17
Bismuth oxide, anhyd., dms. ....lb. 4.47 - 5.05
Bismuth oxychloride, dms. .....lb. 4.37 - 4.42
Bismuth subcarbonate, USP dms..lb. 3.20 - —
Bismuth subgallate NF fib dms..lb. 3.15 - —
Bismuth subiodide, fib. dms. ....lb. 5.37 - —
Bismuth subnitrate, NF dms. ....lb. 2.65 - —
Bismuth subsalicylate, USP, dms..lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 - —
Bisphenol-A bgs., c.l., t.l., frt, alld. lb. .30 - —
bgs., l.c.l., same basis.....lb. .31 - —
Blackberry root bark bls. .....lb. .50 - .55
Black haw root bark bls. .....lb. .63 - .65
Black haw tree bark bls. .....lb. .45 - 50

Black Pigments

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs. c.l., works..ton.125.00 - —
bgs., l.c.l., works.....ton.135.00 - —
bgs., l.c.l., New York whse..ton.175.00 - —
Blood, dried, 16-16½% ammonia New York..unit-ton. 6.50 - —
high-grade, unground, 16-17% ammonia bgs. Chicago. unit-ton. 7.00 - —
Blood, dried, soluble, bgs., c.l. .lb. .13 - .14
bgs., t.l. .....lb. .15 - .17
bgs., l.c.l. .....lb. .15½- .35¼
Bloodroot bls. .....lb. .48 - .50

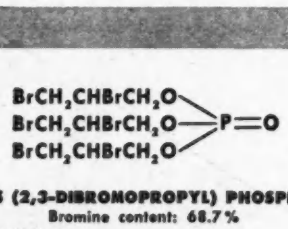
Blue Pigments

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms..lb. 2.20 - 2.75
Peruvian, dms. .....lb. 1.95 - 2.55
BON acid maroons pure, bbls..lb. 1.75 - —
Resinated, bbls. .....lb. 1.50 - —

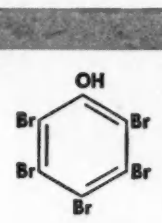
FLAME-PROOF with BROMINE

For plastics, textiles, fluids, protective coatings, paper and wood products . . .
Four new brominated flame-proofing compounds.



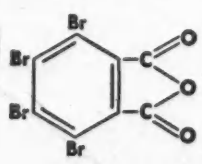
TRIS (2,3-DIBROMOPROPYL) PHOSPHATE
Bromine content: 68.7%

APPLICATIONS:
- To flame-proof polystyrene foam and other foamed systems.
- As a secondary plasticizer in vinyls to impart flame-retardancy.
- To flame-proof cotton and rayon.
- Outstanding flame-proofing properties may be produced in cutting oils.
- As a flame-proofing additive in spray-coating lacquers for paper and wood products.
- High dielectric constant suggests its use in the electrical field (transformers, switches, potting formulations).



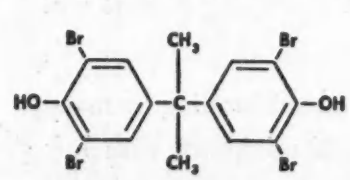
PENTABROMOPHENOL
Bromine content: 81.8%.

APPLICATIONS:
- To flame-proof wall board, piers, telephone poles and other structural wood forms.
- To provide termite control in wood structures.
- As the flame-proofing agent in phenolic resins.
- Presents promise in anti-fouling paints for marine applications.
- As a mildew preventative in resins.



TETRABROMOPHTHALIC ANHYDRIDE
Bromine content: 68.9%

APPLICATIONS:
- As a flame-proofer in the manufactuer of polyamide resins for electrical insulation.
- Can be reacted with polyhydric alcohols to impart flame-proof properties in polyester resins and in the manufacture of alkyd resins for protective coatings.
- As a curing agent in the manufacture of epoxy resins.
- In the manufacture of novel phthalein dyes.



TETRABROMOBISPHENOL-A
Bromine content: 58.8%

APPLICATIONS:
- In the manufacture of flame-proof epoxy foams and coatings.
- To reduce flammability in polyurethane and styrene foams.
- May lead to flame-proof polyester resins by reaction with dibasic acids.
- May give unusual polycarbonate resins.

BROMINATED COMPOUNDS are several times more efficient than their chlorine analogs for flame-proofing. This superiority is fundamental rather than one of degree, and it is why these compounds may increase the fire-resistance of your plastics, textiles, fluids, protective coatings, paper and wood products.

The flame-proofing advantages of these new Michigan Chemical compounds permit the use of smaller quantities than would be required with chlorine compounds. As a result, there will be less disturbance of the physical properties and appearance of the end product.

Michigan Chemical can now furnish testing quantities of these new compounds. Your letterhead request for samples or data will receive prompt attention.

*Reg. U. S. Pat. Off.

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EASTERN SALES OFFICE: 230 Park Avenue • New York 17, New York

C-58-6

Bone black, dms., l.c.l. frt. alld. lb. .18 - .22¼
Pacific coast bone black prices 2c. per lb. higher.
Bonemeal, steamed, works, E ton.65.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic).
Borax, tech., anhyd., 99½%, bgs., c.l., works ton.87.50 - —
bgs., ton lots, ex whse, New York or Chicago ton.143.75 - —
bgs., smaller lots, same basis, ton.148.75 - —
bulk, c.l., works ton.73.50 - —
gran., decahydrate, 99½%, bgs., c.l. works ton.47.50 - —
bgs., ton lots, ex whse, New York or Chicago ton.103.75 - —
bgs., smaller lots, same basis, ton.108.75 - —
bulk, c.l., works ton.41.00 - —
pentahydrate, 99½%, bgs., c.l., works ton.63.00 - —
bgs., ton lots, ex whse, New York or Chicago ton.119.25 - —
bgs, smaller lots, same basis, ton.124.25 - —
bulk, c.l., works ton.56.50 - —
powd., 99½%, bgs., c.l., works, ton.52.50 - —
bgs., ton lots, ex whse, New York or Chicago ton.108.75 - —
99½%, bgs., smaller lots, same basis ton.113.75 - —
USP borax $15 per ton higher.
Bordeaux powder, tribasic, bgs., c.l., dlvd lb. .24 - —
bgs., l.c.l., same basis lb. .26 - —
Boric acid, tech., anhyd., 99.9%, bgs., c.l., works ton.335.00 - —
bgs., ton lots ex whse, New York or Chicago ton.390.00 - —
bgs., smaller lots, same basis, ton.415.00 - —
cryst., 99.9%, bgs., c.l., works, ton.133.50 - —
bgs., ton lots, ex whse, New York or Chicago ton.190.75 - —
bgs., smaller lots, same basis, ton.195.75 - —
dms., c.l., works ton.158.00 -178.00
dms., ton lots, ex whse, New York or Chicago ton.215.25 -235.25
dms., smaller lots, same basis, ton.220.25 -240.25
gran., 99.9%, bgs., c.l., works, ton.108.50 - —
bgs., ton lots, ex whse, New York or Chicago ton.165.75 - —
bgs, smaller lots, same basis ton.170.75 - —
dms., c.l., works ton.133.00 -153.00
dms., ton lots, ex whse, New York or Chicago ton.190.25 -210.25
dms., smaller lots, same basis, ton.195.25 - —
bulk, c.l., works ton.102.50 - —
powd., 99.9%, bgs., c.l., works, ton.113.50 - —
bgs., ton lots, ex whse, New York or Chicago ton.170.75 - —
bgs., smaller lots, same basis, ton.175.75 - —
dms., c.l., works ton.138.00 -158.00
dms., ton lots, ex whse, New York or Chicago ton.195.25 -215.25
dms., smaller lots, same basis, ton.200.25 -220.25
USP boric acid $25 per ton higher.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP, 1,500-lb. cyls., works lb. 1.25 - —
100-lb. cyls., works lb. 1.70 - —
Boron trifluoride gas, cyls, truckload, works lb. .62 - —
cyls., l.t.l., works lb. .70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Broenner's acid, bbls. lb. 1.76 - —
Bromine purif. cs., c.l., t.l., dlvd. E of Rockies lb. .32 - —
c.s., l.c.l., same basis lb. .34 - .39
ret. dms. c.l., t.l., dlvd. E of Rockies lb. .31 - —
ret. dms. l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½- —
Bromochloromethane dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. cbys lb. 1.80 - 1.90
Bromstyrol, bots. lb. 5.45 - 5.70
Brucine, cns., 100-oz. lots oz. 1.20 Nom.
Brucine sulfate, NF, cns., 100-oz. lots oz. 1.15 Nom.
Buchu leaves, bls. lb. 1.20 - —

Brown Pigments

Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

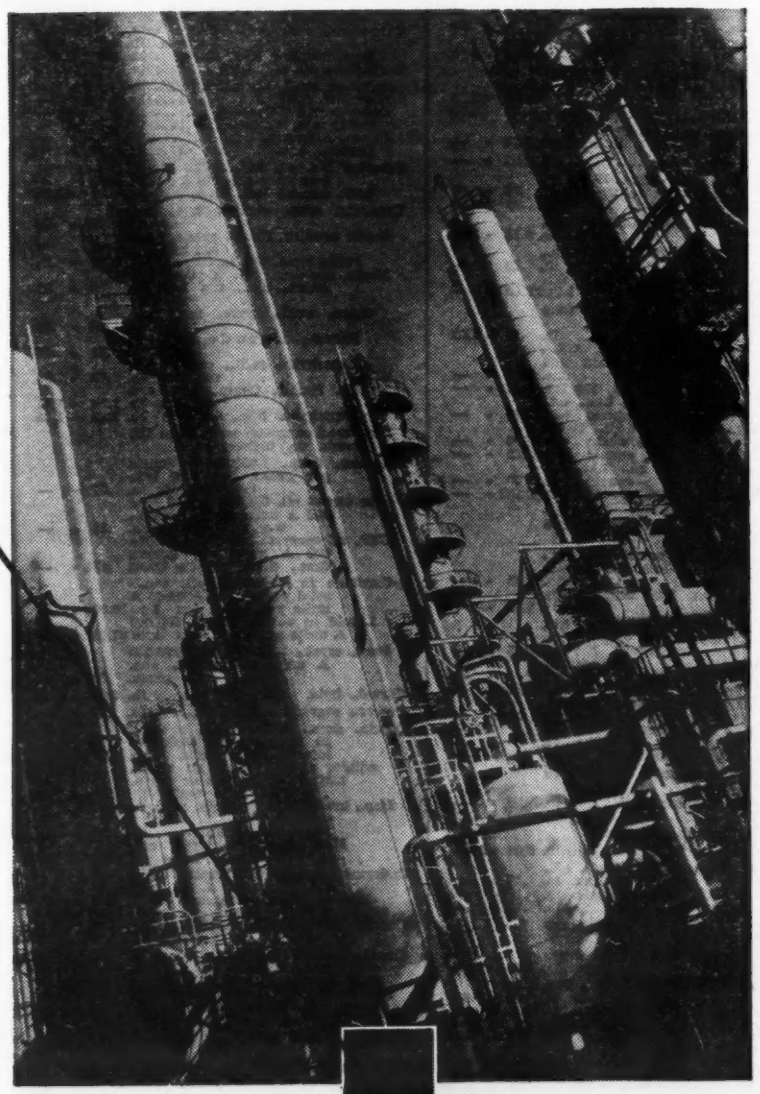
Butadiene, refd. cyls., c.l., refy lb. .21 - —
cyls., l.c.l., refy lb. .22 - —
tanks, contract, refy lb. .14½- .15
Butane, indust., tanks, group 3 gal. .04 - —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .14½- —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .14½- —
sec-Butyl acetate syn., dms., c.l., dlvd.E lb. .14¾- —
dms., l.c.l., same basis lb. .15¾- —
tanks, same basis lb. .12¼- —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E. lb. .57½- —
dms., l.t.l., same basis lb. .58½- —
tanks, same basis lb. .55 - —
Prices of n-butyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Butyl alcohol, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., frt. alld lb. .18 - —
tanks, frt. alld lb. .14½- —
Syn., dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½- —
Butyl alcohol, sec-synthetic, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .12½- —
Butyl alcohol, tert-synthetic, dms., c.l., frt. alld. dlvd. E lb. .14¾- —
dms., l.c.l., same basis lb. .15¾- —
tanks, same basis lb. .12¼- —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½- —
dms., l.c.l., works lb. .38¼- —
n-Butyl ether dms., c.l., works lb. .33¼- —
dms., l.c.l., works lb. .36 - —
tanks, works lb. .33¼- —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½- —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., l.c.l., works lb. .55½- —
Butyl oleate, refd., dms., l.c.l., works lb. .32 - —
Butyl phenylacetate, dms., lb. 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld, E. of Mississippi lb. .27¼- —
dms., l.c.l., same basis lb. .28¼- —
Butylamine (see Mono-, Di- and Tri-butylamine).
6-tert-Butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs., c.l., works, lb. .27½- —
bgs., l.c.l., works lb. .28½- —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb. .19½- —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½- —
tanks, same basis lb. .32½- —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt. alld. E. of Rockies lb. 5.45 - —
Light shade, bbls., same basis lb. 4.55 - —
Medium shade, bbls., same basis, lb. 5.20 - —
Medium light shade, bbls., same basis lb. 4.80 - —
Orange-red shade, bbls., same basis lb. 4.20 - —
Yellow, all shades, bbls., frt. alld. E. of Rockies lb. 3.75 - —
Cadmium iodide, 25-lb. fib. dms. lb. 6.75 - 7.00
Cadmium metal, ingots or sticks, cs., dlvd lb. 1.45 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld. E. of Rockies lb. 1.61 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 1.91 - —
light shade, bbls., same basis lb. 1.68 - —
Medium shade, bbls., same basis, lb. 1.83 - —
Medium light shade, bbls., same basis lb. 1.76 - —
Maroon shade, bbls., same basis lb. 1.99 - —
Cadmium-selenide lithopone, maroon, bbls., frt. alld. E. of Rockies, lb. 2.72 - —
Cadmium-selenide lithopone, maroon, dark shade, bbls., same basis lb. 2.77 - —
Orange, bbls., same basis lb. 1.54 - —
Red, orange-red shade, bbls., same basis lb. 1.62 - —
Red, light shade, bbls., same basis, lb. 1.84 - —
Red, medium-light shade, bbls., same basis lb. 1.96 - —
Red, medium shade, bbls., same basis lb. 2.19 - —
Red, dark shade, bbls., same basis, lb. 2.52 - —
Cadmium-selenide lithopone, yellow, all shades, bbls., frt. alld. E. of Rockies lb. 1.15 - —
Caffeine, NF, citrated, dms., 100-lb. lots or more lb. 2.70 - —
USP, nat., cryst., anhyd., 100-lb. lots or more lb. 2.50 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 2.33 - —
Syn., cryst., anhyd., dms., 100-lb. lots or more lb. 2.50 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 2.33 - —
Cajuput oil, native, cns. lb. 1.75 - 2.55
Redist., USP, cns lb. 1.90 - 2.10
Calamine, USP, dms. lb. .34 - —
Calamus oil, bots lb. 12.00 -22.50
Calciferol, cryst., 10-kilo or more lots, works gram. .54 - —
1-10 kilo lots gram. .55 - —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate, fib. dms., 100 lbs. or more, frt. adjusted lb. 4.00 - —

Progress Report from Petro-Tex:

100% More Butadiene
New C_4 Olefins...



A year ago we increased butadiene capacity to 200,000 tons/year and also increased the flexibility of our plant to produce butane-based olefins not previously available in the same grades and quantities.

Currently, we have very substantial continuous production at attractive prices on

BUTADIENE

DIISOBUTYLENE

TRIISOBUTYLENE

n-BUTENE 1
($CH=CH-CH_2-CH_3$)
95% minimum purity

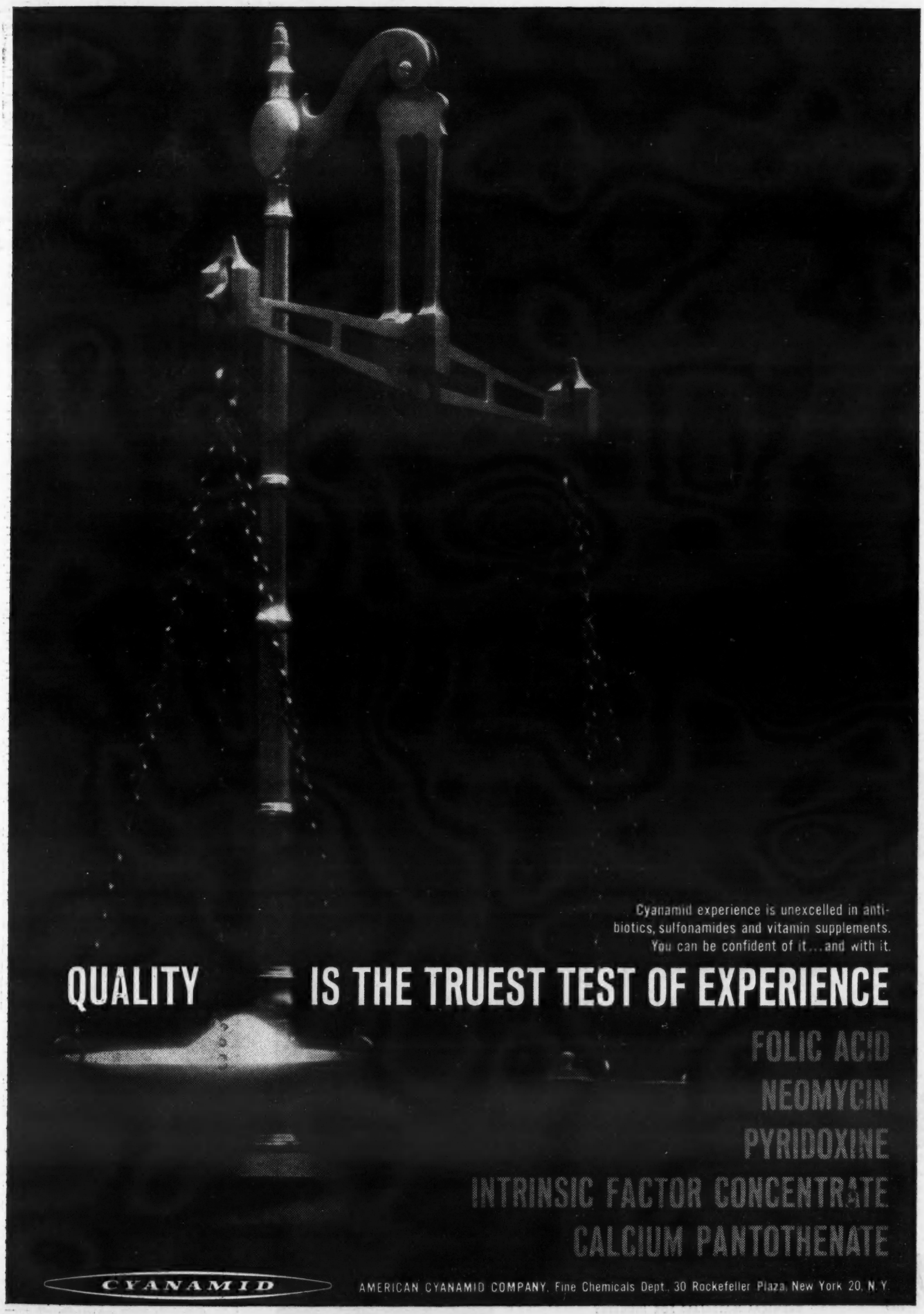
n-BUTENE 2
($CH_3-CH=CH-CH_3$)
95% minimum purity

We invite inquiries for domestic tank-car and overseas ocean-tanker shipments of these C_4 hydrocarbons. We also will welcome discussion of commercial-volume production of other related petrochemicals.

Petro-Tex®

PETRO-TEX CHEMICAL CORPORATION
HOUSTON 1, TEXAS
JOINTLY OWNED BY
TENNESSEE GAS TRANSMISSION COMPANY AND FOOD MACHINERY AND CHEMICAL CORPORATION

Calcium arsenate, dealers, bgs., c.l., frt. alld lb. .09 - .09¼
bgs., l.c.l., same basis lb. .10 - .10½
Calcium bromide, NF, 100 lbs. or more lb. .97 - —
Calcium carbide, standard generator size, 600-lb. dms., c.l., dlvd ton.149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton.10.50 - —
chalk, whiting, 325 mesh, bgs., c.l., works ton.32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
Calcium carbonate, precip., dense, bgs., c.l., works ton.32.50 - —
bgs., l.c.l., works ton.42.50 - —
medium, bgs., c.l., works ton.38.00 - —
bgs., l.c.l., works ton.48.00 - —
surface treated, bgs., c.l., works, ton.37.50 - —
bgs., l.c.l., works ton.47.50 - —
ultrafine, bgs., c.l., works ton.110.00 -160.00
bgs., l.c.l., works ton.120.00 -175.00
Calcium chloride, flake, 77-80%, paper bgs., c.l., works, frt. equald ton.31.00 - —
Conc., flake or pellet, 94-97%, paper bgs., c.l., works, frt. equald ton.37.80 - —
paper bgs., c.l., works ton.37.00 - —
Purif., gran., dms. lb. .27 - —
USP, gran., dms. lb. .32 - —
Liquor, 40%, tanks, frt, equald. ton.12.50 - —
Solid, 73-75%, dms., c.l., frt. equald ton.29.50 - —
dms., l.c.l., works, frt. equald. ton.36.00 -73.00
Calcium chromate, bgs., frt. equald. lb. .29½- .30
Calcium cyanide, dms., c.l., dlvd. E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb. .24 - .55
Calcium cyclamate, 100-lb. dms lb. 2.95 - —
Calcium gluconate, AA, dms. lb. .76 - —
USP, dms. lb. .67 - .69
Calcium hydride, lump, dms., works. lb. 2.20 - 3.00
Calcium hypochlorite, high test, 45-lb cs., dlvd. E. of Rockies. cs.22.95 -25.10
100-lb. dms., same basis dm.30.80 -34.50
Calcium hypophosphite, dms., 1,000-lb lots lb. 1.28 - —
Calcium iodide, jars lb. 4.52 - —
Calcium lactate, NF, dms., 10,000-lb. lots or more, works lb. .36 - .40
smaller lots, works lb. .41 - .48
Calcium mandelate, USP, dms., works lb. 2.10 - 2.25
Calcium naphthenate, liq., 4% Ca., dms., frt, equald lb. .30 - —
Calcium pantothenate, dms., frt. adjusted kilo.35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenolsulfonate, dms. lb. .99 - 1.00
Calcium phosphate, dibasic, USP, bgs., c.l., frt. equald 100 lbs. 8.25 - —
bgs., l.c.l., frt. equald 100 lbs. 9.00 - —
Feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.83.25 - —
bgs., c.l., t.l., f.o.b. Texas City works ton.77.70 - —
bgs., l.c.l., frt. equald ton.93.25 - —
21% P., bgs., c.l., t.l., frt. equald ton.94.50 - —
bgs., l.c.l., frt. equald ton.104.50 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bg., c.l. prices
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald. 100 lbs. 7.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.95 - —
Calcium phosphate, tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald. 100 lbs.10.00 - —
Calcium phytate bgs., works lb. .50 - —
Calcium resinate precip, dms. ton lots, frt. alld., works lb. .36¼- —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½- —
Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Calcium sulfate (see Gypsum)
Calomel, NF X, powd., 100-lb. dms.lb. 5.42 - —
Camphene 46° m.p., dms. incl., c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16½- —
tanks, same basis lb. .12½- —
Camphene, chlorinated 67-69% (see Toxaphene)
Camphor monobromated NF dms., kgs. lb. 3.63 - 3.70
Camphor, nat., USP powd. cs., 100-lb. lots lb. .60 - .65
tablets, 1-oz. cs. lb. .85 - .90
USP, gran., powd. bbls., 2,000-lb. lots lb. .59 - —
Syn., USP, gran., powd., bbls., 1,000-lb. lots lb. .60 - —
bbls., smaller lots lb. .61 - —
tablets, ctns., 1,000-lb. lots lb. .65 - —
ctns. 500-lb. lots lb. .66 - —
ctns. smaller lots lb. .67 - —
tech., 1 bbl. or more lb. .48 - —
Camphor oil, sassafrassy, dms. lb. .40 - .65
White, dms. lb. .29 - .50
Cananga oil, native, cns. lb. 7.25 - 8.00
Rectified, cns. lb. 9.55 -11.25
Candelilla wax, crude, bgs. lb. .53 - .54
Refd., bgs. lb. .59 - .61
Powdered Candelilla wax 20 to 100 mesh, 8c. higher.
Cantharides, Chinese, cs. lb. 2.00 - 2.05
powd., bxs. lb. 2.25 - 2.30
Russian, bgs. lb. 2.75 - —
powd., bxs. lb. 3.00 - 3.25
Capric acid, CP, dms. lb. .28½- .31
tanks lb. .26 - —
Capryl alcohol, 85% dms., c.l., and t.l., works lb. .19 - —
dms., l.t.l., same basis lb. .19½- —
tanks, frt. equald lb. .16½- —
Sec. 92-99%, dms., c.l. lb. .22 - —
dms., l.c.l. lb. .23 - —
tanks lb. .19½- —
Caprylic acid, dms. lb. .28½- .31
tanks lb. .26 - —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - 4.75
NF, from African pepper, dms lb. 4.50 - 5.25
Caraway, oil, dms. lb. 2.75 - 3.50
Caraway seed, Dutch, bgs. lb. .10¾- —
Polish, bgs. lb. .09½- —
Carbazole, 97%, bbls. ton lots, works lb. 1.05 - —
Carbon black, channel, rubber, beads, bulk, c.l., works lb. .07¼- —
bgs., c.l., works lb. .07¾- —
bgs., l.c.l., works lb. .14½- —
Furnace, fast extruding, bgs., c.l., works lb. .06¾- —
ctns., l.c.l., whse. lb. .12½- —
high abrasion, bulk, c.l., works. lb. .07¼- —
bgs., c.l., works lb. .07¾- —
bgs., l.c.l., dlvd. or whse lb. .13½- —
high modulus, bgs., c.l., works. lb. .06¼- —
ctns., l.c.l., whse. lb. .12 - —
semi-reinforcing, bgs. c.l., works. lb. .05¾- —
bgs., ctns., l.c.l., whse lb. .11½- —
Carbon black, pigment, high color beads, ctns., c.l., works lb. .72 - —
ctns., l.c.l., dlvd. or whse lb. .79 - —
medium color, uncompressed, bgs., c.l., works lb. .13½- —
bgs., l.c.l., dlvd. or whse. lb. .21 - —
Carbon dioxide indust. wholesale, bulk, dlvd., Metropolitan area ton.73.00 -115.00
50-lb. cyls., dlvd. lb. .09 - .11
Solid, bulk, wholesale, works ton.85.00 - —
Carbon disulfide, 55-gal. dms. c.l., works, frt. equald to competitive points lb. .07 - —
55-gal. dms. l.c.l., same basis lb. .08½- .09
5-gal. dms., 30 dms. to c.l., same basis lb. .13 - —
5-gal. dms., less than 30 dms., same basis lb. .16 - —
tanks, dlvd. lb. .0545- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld lb. .12¾- —
dms., l.c.l., frt. alld. lb. .15¼- —
Carbon tetrachloride, tech., consumers, dms., c.l., t.l., frt. alld. lb. .11¾- —
dms., l.c.l., t.l., frt. alld lb. .14¼- —
tanks, frt. alld. lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb. lots, works lb. 4.00 - 4.25
dms., smaller lots, works lb. 4.10 - 4.75
Cardamom oil, NF, bots. lb.45.00 -55.00
Cardamom seed, bleached, "A" lb. 2.95 - —
Bleached, "B" lb. 2.80 - —
Decorticated Alleppey, cs. lb. 2.65 - —
Guatemala, cs. lb. 2.75 - —
Green, Alleppey, bgs. lb. 2.25 - —
Ceylon, bgs. lb. 2.15 - —
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd. lb.16.80 - —
bulk, smaller lots, dlvd. lb.16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .68 - .69
North country, No. 2, crude, bgs., ton lots lb. .76 - .77
refd., pure, ton lots lb. .92 - .93
North country, No. 3, Ceara, crude, bgs., ton lots lb. .70 - .72
Ceara, refd., pure, bgs., ton lots lb. .79 - .80
Parnahyba, crude, bgs., ton lots lb. .71 - .73
Parnahyba, refd., pure, bgs., ton lots lb. .79 - .80
Yellow, No. 1, Ceara, bgs., ton lots lb. 1.20 - 1.22
Parnahyba, bgs., ton lots lb. 1.22 - 1.24
Powdered carnauba wax, 20 to 100 mesh. 8c. higher.
Carotene, tech., 1,350,000 A units per gram. tins 5-10 kilo lots, dlvd gram. .24½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd million units .174 - —
b-Carotene in vegetable oil, semi-solid suspension, 400,000 A units per gram. cns kilo.69.60 - —
Liquid in vegetable oil, 500,000 A units per gram., cns kilo.87.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram., cns. gram. .29 - —
Carvol, bots. lb. 5.00 - 5.40
Cascara sagrada bark, bulk lb. .30 - —
Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .56 - —
edible, acid, precip., 80 mesh, bgs., 10,000-lb lots or more, works lb. .64 - —
Imp., inedible, acid-precip, grd., Argentine, bgs., c.l., ex-dock, Eastern seaports lb. .19 - .19¼
New Zealand, bgs., c.l., same basis lb. .24 - .24½
Cashewnut shell liquid, treated dms., c.l., Newark, N. J. lb. .22 - —
dms., ton lots, same basis lb. .23 - —
dms., dm. lots, same basis lb. .25 - —
Cassella acid, dms., frt. alld., 100% basis lb. 1.44 - 1.75
Cassia, Padang, "A," bls. lb. .54 - —
"B" lb. .53 - —
"C" lb. .52 - —
Korintje "A" lb. .54 - —
"B" lb. .53 - —
"C" lb. .52 - —
Cassia oil (see Cinnamon leaf oil, USP).
Castor oil, dom., blown, dms., c.l. lb. .2650- —
dms., l.c.l. lb. .2750- —
dehydrated, bodied, dms., c.l.lb. .2750- —
dms., l.c.l. lb. .2910- —
tanks lb. .2600- —
unbodied, dms., c.l. lb. .2660- —
dms., l.c.l. lb. .2760- —
tanks lb. .2460- —
hydrogenated, bgs., ton lots lb. .3125- —
bgs., l.c.l., dlvd. lb. .3350- —
No. 1, dms., c.l. lb. .2300- —
dms., l.c.l. lb. .2400- —
tanks lb. .20½- —
No. 3, tech., dms., c.l. lb. .22¼- —
dms., l.c.l. lb. .23¼- —
tanks lb. .20¼- —
Refd. and deodorized, dms., c.l. lb. .2750- —
dms., l.c.l. lb. .2850- —
USP, dms., c.l. lb. .2450- —
dms., l.c.l. lb. .2550- —
tanks lb. .2250- —
Imp., No. 1, Brazilian, tanks lb. .1600- —
Castor oil, sulfonated, 50%, dms., works lb. .15 - .15¼
75%, dms., works lb. .19½- .20
Castor oil acids, dehydrated, dms. lb. .44¼- .46¼
split, dms. lb. .37¼- .38¼
Castor pomace, bgs., c.l., works ton.37.50 - —
Castoreum, nat., cns. lb. 5.25 - —
Syn., cns. lb. 9.00 - —
Catechol, CP, cryst., fib., dms., works lb. 2.17½- —
Resub., dms., works lb. 4.29½- —
Catnip leaves, Southern, bls. lb. .75 - —
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil, USP XIII cns., dms. lb. 3.10 - 4.50
Cedarwood oil, cns., dms. lb. .50 - .95
Celery seed, French, bgs. lb. .30 - —
Indian, bgs. lb. .20 - —
Celery seed oil, bots. lb.13.00 -16.00
Cellulose acetate, flake, powd., bgs. ctns., 100-lb. lots or more, dlvd., E. lb. .35 - .45
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E lb. .545 - .555
27% butyryl content, bgs., dlvd. E lb. .595 - .605
38% butyryl content, bgs., dlvd. E lb. .545 - .555
38% butyryl content, half-second, bgs., dlvd. E lb. .545 - .553
50% butyryl content, bgs., dlvd., E lb. .585 - .595
Cellulose gum, methyl (see Methyl Cellulose).
Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works, frt. alld lb. .57 - —
bgs, smaller lots, same basis. lb. .59 - —
Cerium chloride 48% dms. dlvd lb. .30 - —
Cerium hydrate 74% CeO fib dms., 100-lb. lots or more lb. 1.40 - —
77%CeO fib dms. 100-lb. lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate).
Cerium oxide, optical grade, bgs., 50-lb lots or more, dlvd lb. 1.85 - 1.98
bgs., smaller lots, dlvd lb. 2.03 - 2.23
Cetyl alcohol, extra fib cns., 500-lb. lots or more lb. .65 - .72
NF, fib cns. 140-lb lots or more. lb. .48 - —
Chalk (see Calcium carbonate).
Chamomile flowers Hungarian style, bls lb. Nom. - —
Roman, cs. lb. 2.50 - —
Chamomile oil, blue Hungarian, bots lb.350.00 - —
Charcoal, activated, NF, fib dms. c.l., works lb. .25 - .32
fib. dms., 5-ton lots, works lb. .26½- .32½
fib. dms., smaller lots. works lb. .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal bone (see Bone black).
Charcoal hardwood, lump, bulk, c.l., f.o.b. plant ton.55.00 - —
briquets, bulk, c.l., f.o.b. plant ton.78.00 -80.00
5-lb. paper bgs., c.l., same basis ton.106.00 - —
Charcoal, hardwood, briquets, 10-lb. paper bgs., c.l., same basis ton.96.00 - —
25-lb. paper bgs., c.l., f.o.b. plant ton.87.00 - —
40-lb. paper bgs. c.l., same basis ton.84.00 - —
Chenopodium oil, NF, cns lb. 4.50 - 5.25
Chestnut extract, Imp. solid, 60% tannin, bgs., ex dock lb. .0855- —
powd., 68% tannin, bgs., ex dock lb. .0969- —
Chicago acid paste, bbls. frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech, 94% min., dms., c.l., works lb. .23 - —
dms., l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb lots lb. 1.00 - —
jars, 500-lb. lots. lb. 1.03 - —
jars, 100-lb lots or less lb. 1.05 - —
Chlordan, agricultural dms., c.l., frt. alld lb. .65 - —
dms. l.c.l. 5,000 to 10,000-lb. lots, frt. alld lb. .66 - —
Clarified, dms., c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000-10,000-lb lots, frt. alld lb. .70 - —
Chlorinated paraffin, 40%, dms., c.l. frt. alld lb. .16¼- —
dms. l.c.l. 10 dms. or more, same basis lb. .17¼- —
70%, dms., c.l., same basis lb. .18½- —
dms. l.c.l. 10 dms. or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l., works lb. .61 - —
125, 1,000 cps., ctns., c.l., works. lb. .70 - —
ctns., l.c.l., works lb. .71 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .11 - —
cyls., l.c.l. Metropolitan area lb. .12½- .13¾
tanks, single units, works, frt. equald 100 lbs. 3.15 - —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs. 4.05 - —
Chlorine, liq., tanks, multiple units, 4 cars, same basis 100 lbs. 4.25 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.25 - 5.75
tanks, multiple units, 1 car, same basis 100 lbs. 6.25 - 7.25
Chloroacetic acid, mono, flake, 99%, dms., c.l. lb. .23½- .25½
dms., l.c.l. lb. .24½- —
tech. flake, 96-97%, dms., c.l., frt. equald lb. .19 - —
dms., l.c.l., frt. equald lb. .20 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.45 - —
m-Chloroaniline, dms., c.l., frt. alld. lb. .78 - —
dms., l.c.l., same basis lb. .80 - —
tanks, same basis lb. .76 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 - —
dms., l.c.l., same basis lb. .54 - —
tanks, same basis lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld, lb. .77 - —
dms., l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works, dlvd. to N.Y. Metropolitan area lb. 1.05 - —
dms., l.t.l., same basis lb. 1.20 - —
p-Chlorobenzaldehyde, dms., l.c.l., works, dlvd. to N. Y. Metropolitan area lb. 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E. lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms. lb. .30 - —
2-Chloro-4-nitroaniline, paste, dlvd. E. 100% basis lb. .81 - —
Powd. dlvd. E. 100% basis lb. .86½- —
4-Chloro-2-nitroaniline, powd. dlvd. E lb. .80½- —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
Chloropicrin, coml., bots lb. 1.50 - —
cyls., 180 lbs., frt. alld lb. .95 - —
cyls., 100 lbs., same basis lb. .97 - —
cyls., 25 lbs., same basis lb. 1.22 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms. ½c. per lb. higher
Choline bitartrate fib. dms., frt. adjusted kilo. 2.75 - 3.00
Choline chloride fib. dms., frt. adjusted kilo. 2.75 - 3.00
Choline dihydrogen citrate, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Chrome green, CP, dark, light medium blue content 1-15%, bbls., dlvd. E. of Rockies lb. .40 - .42
blue content 16-30%, bbls., same basis lb. .40 - .42
blue content 31-45%, bbls., same basis lb. .41 - .43
blue content 45-49%, bbls., same basis lb. .44 - .46
Reduced color, 25% lb. .19 - .20
Chrome green prices 1c. higher W. of Rockies.
Chrome orange, CP, bbls., dlvd. E. of Rockies lb. .35 - —
Chrome orange prices 1c. higher W. of Rockies.
Chrome yellow, CP, bbls., dlvd. E. of Rockies lb. .35 - —
Chrome yellow price 1c. higher W. of Rockies.
Chromic acid, 99¾% dms., c.l., works, frt. equald lb. .29½- —
dms., l.c.l., dlvd. N. Y. Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, bbls., works lb. .09½- —
cbys., works lb. .11¼- —
Chromium fluoride, bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld lb. 1.20 - —
Pure, bgs., c.l., frt. alld. lb. .44½- —
bgs., l.c.l., same basis lb. .45¼- —
Chromium trioxide, NF, bots lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs lb. .35 - .40
NF, yellow, broken, bgs. lb. .35 - .40
Cinnamic acid refd. bots. lb. 2.50 - 3.50
Cinnamic alcohol, bots lb. 1.90 - 2.20
Cinnamic aldehyde, dms. lb. .95 - 1.25
Cinnamon, Ceylon No. 2, bgs lb. .77 - —
Ceylon, "0000," bgs lb. 1.00 - —
Cinnamon bark oil, bots lb.36.00 -70.00
Cinnamon leaf oil, crude, dms lb. 1.35 - 2.00
USP (Cassia), cns., dms lb. 8.50 -13.50
Citral, CP, bots. lb. 3.85 - —
Extra, bots. lb. 5.05 - —
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½- .31
hydrous, fine gran. bgs., dms., c.l lb. .27½- .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28½
bgs., dms., smaller lots lb. .29 - .29½
Powdered citric acid ½c. higher
Citronella oil, Ceylon, dms. lb. .58 - 1.00
Java-type, dms. lb. .57 - 1.00
Citronellal, bots., dms lb. 1.90 - 2.10
Citronellol, bots., dms lb. 2.90 - 3.75
Civet, artif., bots. lb.13.75 -15.00
Nat., bots. oz. 8.50 -15.00
Clay, ball., dom., airfloated, bgs., c.l., Tenn ton.17.50 -21.50
crushed, shed moisture, bulk, c.l., Tenn ton. 8.00 -11.00
Imp., airfloated, bgs., c.l., Atl. port net-ton.42.00 -45.75
lump, bulk, Atl. port net-ton.29.50 -35.75
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works.ton.10.00 -12.00
Georgia, bgs., l.c.l. works. ton.15.50 - —
300 mesh bgs., c.l., Georgia, works ton.13.50 -14.50
bgs., l.c.l., ex-whse ton.35.00 -36.00
Imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me. long-ton.20.00 -35.00
powd., bgs., c.l., ex dock. net-ton.50.00 - —
bgs., l.c.l., ex whse. net-ton.60.00 -70.00
Cleve's acid, mixed, bbls. lb. 1.05 - —
Cloves, Madagascar, bgs lb. .42 - —
Zanzibar, bgs. lb. .47 - —
Clove bud oil, USP, dms. lb. 2.60 - 3.35
Clove leaf oil, crude, dms lb. 1.00 - 1.35
CMC, crude, 96.4% low or medium vis. bgs. or fib. dms., 23,000 lbs., dlvd. E., 100% basis lb. .41½- —
CMC, crude, 96.4% low, or medium vis., bgs., or fib. dms., less than 23,000 lbs. dlvd. E., 100% basis lb. .43½- —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .41½- —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½- —
CMC, purif. high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 - —
bgs., smaller lots, same basis. lb. .59 - —
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for solns., tanks, works gal. .16 - —
Refd., resale, indust., dms., c.l., ex whse. gal. .35 - —
dms., l.c.l., ex whse. gal. .39 - —
tanks, works gal. .20½- —
Coaltar pitch, aluminum, bulk, works ton.44.00 - —
Carbon and indust., bulk, works, ton.44.00 - —
Core, bulk, works ton.40.50 - —
Fiber, bulk, works ton.48.00 - —
Roofing, 140-155°F., Federal Specification RP-381 Type 1, tanks, works ton.41.00 - —
Cobalt acetate 23.7% Co. dms. dlvd. lb. 1.10 - —
Cobalt blue, genuine, 250 lb. bbls., dlvd. E. of Rockies lb. 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies.
Cobalt blue imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.57 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. 1.05 - —
Cobalt hydrate 60-61% Co., dms., dlvd lb. 2.20 - —
Cobalt linoleate, fused 8½% Co., dms. lb. .71½- —
Liq., 6% Co., dms. lb. .57½- —
Cobalt metal, 97-99%, kgs., ex whse. lb. 2.00 - —
Cobalt naphthenate liq., 6% Co., dms., dlvd lb. .48¾- —
Cobalt nitrate, 20.1% Co. bbls. dlvd. lb. .85 - —


Cyanamid experience is unexcelled in antibiotics, sulfonamides and vitamin supplements. You can be confident of it...and with it.
QUALITY IS THE TRUEST TEST OF EXPERIENCE
FOLIC ACID
NEOMYCIN
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INTRINSIC FACTOR CONCENTRATE
CALCIUM PANTOTHENATE
CYANAMID
AMERICAN CYANAMID COMPANY, Fine Chemicals Dept., 30 Rockefeller Plaza, New York 20, N.Y.

Cobalt Oxide—Cyclohexanone

Cobalt oxide, black, 72½-73½% Co., kgs. lb. 1.52 - —
70-71% Co., kgs. lb. 1.48 - —
Cobalt phosphate, pewd., 32.1% Co., kgs., dlvd lb. 1.43 - —
Cobalt resinate, fused, 3% Co. dms. lb. .29½- —
Cobalt sulfate, cryst., 21% Co, dms., dlvd lb. .69 - —
Cobalt sulfate, monohydrated, 33% Co, dms., dlvd. lb. 1.17 - —
Cobalt tallate, 6% Co, dms., dlvd. lb. .44 - —
Cocaine, USP, ens., 100-oz. lots oz.17.80 - —
Cocaine hydrochloride, ens., 100-oz. lots oz.13.75 - —
Cocillana bark, bls. lb. .22 - —
Cocoa butter, bgs. lb. .92 - .97
Coconut oil, crude, tanks, New York lb. .15½- —
tanks, Pac. coast lb. .14½- —
Refd., deodorized, dms., l.c.l. lb. .24 - —
Coconut oil acids, dist., dms. lb. .23½- .26
tanks lb. .21 - —
double dist. (stripped), dms. lb. .24½- .27
tanks lb. .22 - —
Cod oil, dms., spot lb. .09¼- .09½
Codeine, NF, ens., 100-oz. lots oz.13.25 - —
Codeine hydrochloride, ens., 100-oz. lots oz.11.75 - —
Codeine phosphate, USP, ens., 100-oz. lots oz.10.25 - —
Codeine sulfate, USP, ens., 100-oz. lots oz.10.75 - —
Codliver oil, USP, dms. gal. 1.40 - 1.45

Cohosh root, black, bls. lb. .20 - .22
Blue, bls. lb. .20 - .22
Colchicine, USP, bots. oz.27.50 -31.00
Colchicum root, bls. lb. .35 - —
Colchicum seed, bgs. lb. .55 - —
Collodion, USP, dms. lb. .32½- —
Flexible, dms. lb. .34 - —
Colocynth pulp, bls. lb. .72 - —
Colombo root, bls. lb. .15 - .16
Condurango bark, bls. lb. .26 - —
Congo copal gum, No. 1, bgs. lb. .25 - .26
No. 2 bgs. lb. .22 - .24
No. 3, bgs. lb. .15¾- .17
Copaiba balsam, ens., dms. lb. .40 - .80
Copaiba oil, ens. lb. 1.75 - 2.50
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works lb. .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .3190- —
bgs., l.c.l., works lb. .3340- —
Copper chloride, cupric, anhyd., dms., works lb. .42 - .42½
Cryst., dihydrate, dms., works. lb. .28¼- .28¾
Cryst., dried, dms., works lb. .36½- .37
Copper chloride, cuprous, dms., works lb. .3680- .3980
Copper cyanide, tech., dms., 30,000-lb. lots or more lb. .609 - —
dms., 1,000-lb. lots or more lb. .619 - —
dms., smaller lots lb. .639 - .659
Copper gluconate, dms. lb. 3.20 - —
Copper hydrate, dms., c.l., frt. alld. E. of Miss. lb. .47¼- —
dms., l.c.l., same basis lb. .47¾- —

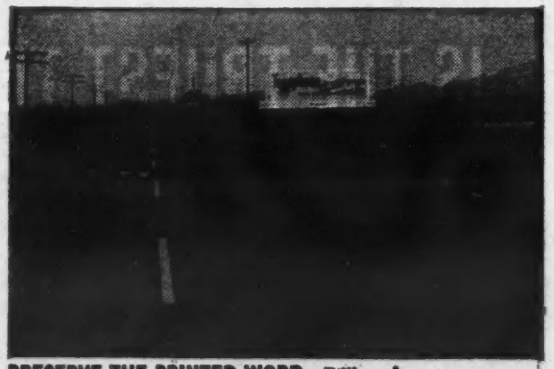
Copper metal, electrolytic, dlvd. Valley basis lb. .36½- —
Copper naphthenate, liq., 8% Cu, dms., frt. alld lb. .36½- —
Copper nitrate, tech., cryst., dms., works lb. .29 - .31
Copper oleate, solid, 8% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb. .42¼- —
Copper oxide, red, 97%, USN, Type I, bbls., 100-5,000-lb. lots. lb. .40½- —
80% USN Type II, bbls., 100-5,000-lb. lots or more, works lb. .38½- —
Copper oxychloride, dms., c.l., works lb. .52 - —
dms., l.c.l., works lb. .53½- .63½
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 - —
10% active quinolinolate, dms lb. 1.14 1.15
Copper resinate, precip, dms., frt. alld lb. .36½- —
Copper sulfate, CP, gran., dms., works lb. .1805- —
Cryst., 99%, bgs., c.l., works. 100 lbs.11.05 - —
bgs., l.c.l., same basis 100 lbs.11.55 -14.05
Copper sulfate, monohydrated, 35%, dms., c.l., works 100 lbs.21.20 - —
dms., l.c.l., works 100 lbs.21.95 - —
Copper sulfate tribasic, distributors, bgs., c.l., same basis, 100 lbs.25.15 - —
bgs., l.c.l., same basis 100 lbs.26.15 -29.15
Copper undecylenate, dms. lb. 2.75 - —
Copra, Atl., Gulf ports, c.l.f. ton.203.00 - —
Pac. ports, c.l.f. ton.198.00 - —
Coriander oil, USP, bots. lb. 8.50 -11.50
Coriander seed, Moroccan, bgs. lb. .09 - —
Rumanian, bgs. lb. .07 - —
Yugoslavian, bgs. lb. .06½- —

Corn oil, crude, tanks, works lb. .12¼- —
Foots (soapstock) acid 95%, tanks, New York lb. .04¾- —
Refd., salad, dms. lb. .1798- .1825
tanks lb. .1508- —
Corn oil, acids, dist., dms. lb. .17¼- .20
tanks lb. .14¾- —
Corn starch (see Starch, corn).
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.33 - —
paper bgs., l.c.l. 100 lbs. 7.58 - —
Corn syrup, 42° Be, non-ret. dms., c.l. 100 lbs. 7.31 - —
non-ret. dms., l.c.l. 100 lbs. 7.46 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bulk gram. 2.50 - 3.00
Costus oil, bots. oz. 6.00 - —
Cottonseed meal, 41%, bgs., Memphis ton.56.00 - —
Cottonseed oil, crude, tanks, South, East lb. .11¼- —
tanks, Valley lb. .11¼- —
tanks, Texas, Lubbock lb. .10¾- —
tanks, Texas, Waco lb. .11 - —
Foots (soapstock) acid 95%, tanks, New York lb. .04 - —
Refd., salad, dms. lb. .17¾- .18
tanks lb. .14¾- —
Cottonseed oil acids, dist., dms. lb. .16¾- .19¼
tanks lb. .14¼- —
Cottonseed pitch, raw, dms., works. lb. .03 - .03¼
tanks, same basis lb. .02¾- —
Coumarin, NF, cryst., dms. lb. 3.60 - 3.70
Cramp bark, NF, bls. lb. .85 - .90
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots. cbys., lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .20 - —
crude, soln. 50%, tanks, works. gal. .192 - —
refd., dms., c.l., works gal. .42 - .44
dms., l.c.l., same basis gal. .53 - .55
tanks, same basis gal. .33 - .35
Creosote oil (see Creosote coaltar).
Creosote, wood, beechwood, cbys., dms. lb. 1.60 - 1.65
Hardwood, NF, bots., cbys. lb. 1.30 - —
Pinewood, dms. incl., c.l., works. lb. .0561- —
dms. incl., l.c.l., works lb. .0634- —
dms. incl., l.c.l., ex whse, New York lb. .0745- —
tanks, works lb. .0460- —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 - —
Cresol, USP, non-ret. dms., c.l., same basis lb. .18 - —
non-ret. dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
m-Cresol, 95-98%, dms., c.l., works. lb. .60 - —
dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95%, 3°C., dms., c.l., frt. equald. lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
2,97%, 2°C., dms., c.l., frt. equald. lb. .22 - —
dms., l.c.l., same basis lb. .23 - —
tanks, same basis lb. .20 - —
o-Cresol 30.5°C., m.p. and over, ret. dms., c.l., frt. equald. lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
30°-30.49°C., m.p., dms., c.l., frt. equald. lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
29°-29.9°C., m.p., dms., c.l., frt. equald. lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
o-Cresol, 25-28.9°C., m.p., dms., c.l., frt. equald. lb. .13 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Cresol, 96%, dms., c.l., dlvd. lb. .52 - —
dms., l.c.l., dlvd. lb. .53 - —
tanks, dlvd. lb. .49 - —
2,3-Cresotic acid, dms., ton lots, works lb. .70 - —
dms., smaller lots, works lb. .72 - —
p-Cresyl methyl ether, ens. lb. 1.80 - 2.05
Cresylic acid, coaltar dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt. equald. gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same basis gal. 1.15 - —
Cresylic acid, coaltar, dom., meta-para content 25% or less, dms., c.l., t.l., same basis gal. 1.20 - —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt. equald. gal. 1.00 - —
Cresylic acid, coaltar, imported, meta-para content, 25% or less, f.o.b. works, frt. equald. to competitive points, 50 dms. or more gal. 1.03½- —
less than 50 dms., same basis, gal. 1.05 - 1.15
tanks, same basis gal. 1.00 - —
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .25 - —
Crotonic acid, dms., 200 lbs. or more, l.c.l., works lb. .31 - —
Cryolite, nat., indust., bgs., c.l., works 100 lbs.13.00 - —
bgs., l.c.l., works 100 lbs.14.25 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .27 - —
Cubeb berries, NF, bgs. lb. .90 - —
Powd., cs. lb. .95 - —
Cubeb oil, ens. lb.12.00 -18.00
Cumene, dms., c.l., works lb. .12 - —
dms., l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin seed, Iranian, bgs. lb. .35 - —
Moroccan, bgs. lb. No prices.
Turkish, bgs. lb. No prices.
Cumin seed oil, bots., ens. lb. 7.50 -14.00
Cutch extract, 55% tannin, bgs., ex dock lb. .07½- —
Cyanamide, fertilizer mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract ton.87.00 - —
pulv., 21% N, bgs., works. unit-ton. 2.82 - —
Indust. grade, bgs., c.l., works ton.75.00 - —
bgs., l.c.l., works ton.96.00 - —
Indust. grade, 6-16 mesh, dms., c.l., works ton.120.00 - —
dms., l.c.l., works ton.140.00 - —
Cyclohexane, 99%, tech., dms., c.l., dlvd. E. of Rockies gal. 1.02 - —
dms., l.c.l., same basis gal. 1.10 - —
dms., c.l., dlvd. W. of Rockies. gal. .77 - —
dms., l.c.l., same basis gal. .85 - —
tanks, works gal. .58 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld. E. lb. .26¼- —
dms., l.c.l., works, same basis lb. .27½- —
tanks, works, same basis lb. .24 - —
Cyclohexanone, tech., dms., c.l., works lb. .32½- —
dms., l.c.l., works lb. .35 - —
tanks, works lb. .29 - —

HOW *HERCULES* HELPS...

PROTECT THE "FROG POND"—This landmark on Boston's historic Common must be kept clean and fresh-looking all year round. "Ramuc" Enamel, a Parlon® (chlorinated rubber) based paint designed for constant submersion in water does the job efficiently. Manufactured by Inertol Co., Inc., Newark, N. J., the paint was last applied in May, 1957. The pool is now well along in its second year, with no repainting indicated.

IMPROVE EXISTING PRODUCTS—The cap and valve of this garden hose spray gun are molded with Pro-fax®, Hercules' exciting new polypropylene. Tough, durable, lightweight, and low in cost, Pro-fax is now providing many new and improved products in fields previously served by metal, wood, or glass.



PRESERVE THE PRINTED WORD—Billboard posters are now being protected with a coating based on EHEC, Hercules® ethyl hydroxyethyl cellulose. EHEC lacquers won't bleed the inks and yet protect the posters against extremes of weather. Its solvency in low-solvent solutions makes EHEC ideal as a film-former in numerous formulations.

HERCULES POWDER COMPANY
INCORPORATED
900 Market Street, Wilmington 99, Delaware

CHEMICAL MATERIALS FOR INDUSTRY

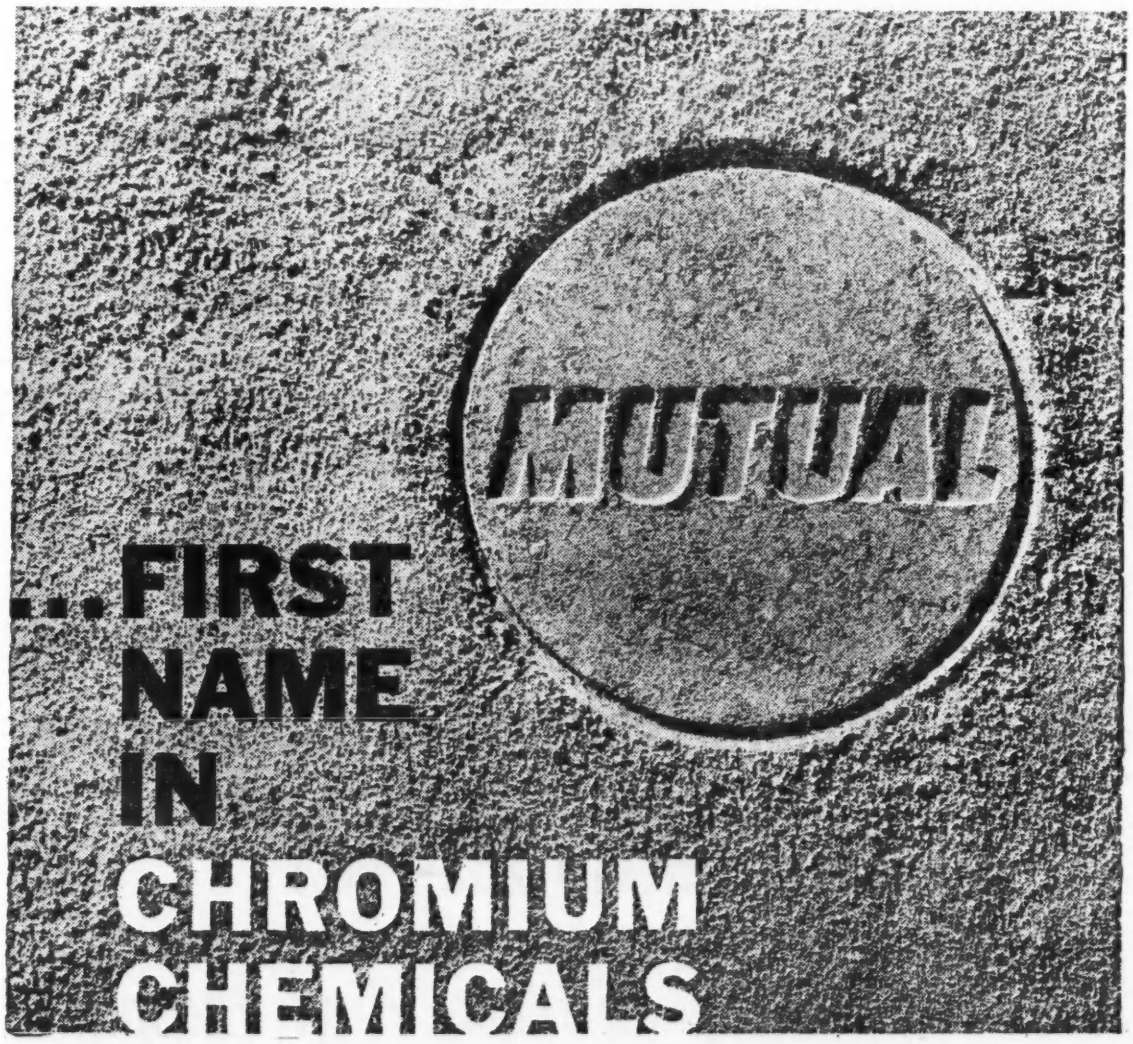
HERCULES

832-7

Cyclohexylamine, dms., c.l., works. lb. .49 - —
dms., l.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cyclopropane, CP, 2-lb. cyls., works. cyl.46.00 - —
6-oz cyls., works cyl.12.00 - —
Cyclopropane, USP, hospitals, cyls., 40-gal. lots gal. .42 - —
cyls., 100-gal lots gal. .41 - —
cyls., 200-gal. lots gal. .40 - —
Cypress oil, bots. lb. 5.30 - —

D

2,4-D, tech., bgs., dms., c.l., works, frt. equald lb. .40 - —
bgs., dms., l.c.l., same basis lb. .45 - .49
2,4-D butyl ester, dms., c.l., works. lb. .43 - —
dms., l.c.l., same basis lb. .48 - .52
tanks, same basis lb. .42 - —
2,4-D isopropyl ester, dms., c.l., works lb. .43 - —
dms., l.c.l., works lb. .48 - .52
tanks, works lb. .42 - —
Dammar gum, Batavia. A/E, cs lb. No stocks.
dust, bgs. lb. No stocks.
E, bgs. lb. No stocks.
East India, Batu, bold, bgs. lb. .13¾- .15
nubs and chips, bgs lb. .08½- .09½
black, bold, bgs lb. .14½- .16½
unscraped, bgs. lb. .13 - .14½
nubs and chips, bgs lb. .12¼- .13½
pale, chips, bgs lb. .14½- .16
nubs, bgs. lb. .17¾ - .20
Siam, cs lb. .31 - .34
Singapore, No. 1, bgs lb. .37 - .42
No. 2, bgs lb. .31 - .34
No. 3, bgs lb. No stocks.
dust, bgs. lb. .17 - .19
seeds, bgs. lb. No stocks.
Dandelion root, bls lb. .28 - —
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 - .47
fib. dms., l.c.l., works lb. .46 - .48
DDT, flake or lump, bgs., c.l., dlvd lb. .22 - —
bgs., smaller lots, same basis. lb. .24 - —
fib. dms., c.l., same basis lb. .23 - —
fib. dms., smaller lots, same basis lb. .25 - —
Powdered DDT 1c. per pound higher.
1-Decanol, tech., dms., c.l., dlvd lb. .41 - —
dms., l.c.l., dlvd lb. .43 - —
tanks, dlvd. lb. .38½- —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½- —
dms., l.c.l., dlvd lb. .24½- —
tanks, dlvd. lb. .21 - —
Perfume grade, bots lb. 1.75 - 2.00
Decyl alcohol, normal (see 1-Decanol).
Deertongue leaves, bls lb. .45 - —
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works ton.51.00 - —
17% P, paper bgs., c.l., works. ton.60.00 - —
paper bgs., t.l., works ton.60.75 - —
18% P, paper bgs., c.l., t.l., works ton.69.12 - —
19% P, paper bgs., works, Houston, Tex., c.l., t.l. ton.71.50 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.
Degras, common, bbls lb. .10 - .12
Neutral, bbls. lb. .21 - .23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E. of Rockies gal. .64½- .66
dms., l.c.l., same basis gal. .69½- .77
tanks, dlvd., same basis gal. .48½- .50
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .66 - —
dms., l.c.l., same basis gal. .71 - .77
tanks, same basis lb. .50 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies gal. .65½- —
dms., l.c.l., same basis gal. .70½- .76½
tanks, same basis gal. .49½- —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .64 - —
dms., l.c.l., same basis gal. .69 - .75
tanks, same basis gal. .48 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .63 - —
dms., l.c.l., same basis gal. .68 - .74
tanks, same basis gal. .47 - —
SD23A, dms., l.c.l., dlvd. E. of Rockies gal. .655 - —
dms., l.c.l., same basis gal. .705 - .765
tanks, same basis gal. .495 - —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .66 - —
dms., l.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —
SD29, dms., c.l., dlvd. E. of Rockies gal. .645 - —
dms., l.c.l., same basis gal. .695 - .793
tanks, same basis gal. .485 - —
SD30, dms., c.l., dlvd. E. of Rockies gal. .63 - —
dms., l.c.l., same basis gal. .68 - .74
tanks, same basis gal. .47 - —
SD35A, dms., c.l., dlvd. E. of Rockies gal. .66 - —
dms., l.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —
SD40, dms., c.l., dlvd. E. of Rockies gal. .64 - —
dms., l.c.l., same basis gal. .69 - .75
tanks, same basis gal. .48 - —
For anhyd. alcohol on above formulas, prices are 7c. per gal. higher.
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms. lb.15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms. lb. 6.50 - —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.40 - —
paper bgs., l.c.l. 100 lbs. 9.55 - —
Dextrin, corn, canary dark, paper bgs., c.l. 100 lbs. 9.24 - —
paper bgs., l.c.l. 100 lbs. 9.39 - —
canary light, paper bgs., c.l., 100 lbs. 9.14 - —
paper bgs., l.c.l. 100 lbs. 9.29 - —
white, paper bgs., c.l. 100 lbs. 8.98 - —
paper bgs., l.c.l. 100 lbs. 9.13 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.
Dextrin, potato, imp., bgs lb. .10½- .11
Dextrose, hydrated, commercial, bgs., c.l., ex whse. 100 lbs. 7.60 - —
bgs., l.c.l., ex whse. 100 lbs. 7.70 - —
Anhydrous, commercial, bgs., c.l., ex whse. 100 lbs. 8.80 - —
bgs., l.c.l., ex whse. 100 lbs. 8.90 - —
Special anhydrous, al. foil lined fib. dms., 200-lb. dms. 100 lbs.14.70 - —
100-lb. dms. 100 lbs.15.20 - —
USP, dms. lb. .19¾- —
Diacetyl, flavor grade, bots. lb. 4.30 - 4.55
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½- —
Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½- —
Diacetone alcohol, acetone-free, dms., c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .13 - —
Tech., dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd lb. .16 - —
tanks, dlvd. lb. .12½- —
Diallylamine, dms., c.l., dlvd lb. .985 - —
dms., l.c.l., dlvd lb. .995 - —
tanks, dlvd. lb. .96 - —
o-Dianisidine, dry, tech., fib. dms. lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .93 - —
dms., l.c.l., same basis lb. .94 - —
tanks, same basis lb. .91 - —
p-Dibromobenzene, bgs., 500-lb. lots. lb. .55 - —
Dibutyl fumarate, dms., c.l., t.l., frt. alld. lb. .33 - —
dms., l.c.l., l.t.l., frt. alld lb. .34 - —
tanks, frt. alld lb. .30½- —
Dibutyl maleate, dms., c.l., t.l., frt. alld. lb. .33 - —
dms., l.c.l., l.t.l., dms, frt. alld. lb. .34 - —
tanks, frt. alld lb. .30½- —
Dibutyl phthalate, dms., c.l., dvd. E. lb. .32½- —
dms., l.c.l., same basis lb. .33½- —
tanks, same basis lb. .30 - —
Dibutyl sebacate, dms., c.l., works. lb. .67½- —
dms., l.c.l., works lb. .68½- —
tanks, works lb. .65½- —
Dibutyl tartrate, dms., works, frt. alld lb. .65½- —
Dibutylamine, dms., c.l., dlvd lb. .55½- —
dms., l.c.l., same basis lb. .56½- —
tanks, same basis lb. .53 - —
2,6-Di-tert-butyl-p-cresol, food grade, dms., t.l., c.l., dlvd lb. 1.20 - —
dms., l.t.l., dlvd lb. 1.24 - —
Feed grade, to vitamin premix distributors, dms., c.l., t.l. dlvd lb. 1.03 - —
dms., l.c.l., same basis lb. 1.07 - —
2,6-Di-tert-butyl-p-cresol, tech., dms., c.l., dlvd lb. .91 - —
dms., l.c.l., dlvd lb. .95 - —
tanks, dlvd. lb. .86 - —
Dicapryl phthalate, dms., c.l., dlvd. lb. .31 - .32
dms., l.c.l., dlvd lb. .32 - .33
tanks, dlvd. lb. .27½- —
Dicapryl sebacate, dms., c.l., works. lb. .63 - —
dms., l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
Dichlorophenoxyacetic acid (see 2,4-D).
2,5-Dichloroaniline, dms., works lb. .83 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾- —
dms., l.c.l., same basis lb. .13¾- —
tanks, same basis lb. .11 - —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb. .12 - —
dms., 2,000 lbs. or more same basis. lb. .14½- —
1,4-Dichlorobutane, dms., c.l. or t.l., works lb. .33½- —
dms., l.c.l., or l.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E lb. .15½- —
dms., l.c.l., l.t.l., same basis lb. .16½- —
tanks, same basis lb. .13 - —
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
dms., l.c.l., works lb. .06 - —
tanks, works lb. .03 - —
Dicyclohexylamine, dms., c.l., works, lb. .54 - —
dms., l.c.l., works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, fib., dms., c.l., works, frt. alld lb. .59½- —
fib. dms., l.c.l., same basis lb. .60 - —
Didecyl phthalate, dms., c.l., works, lb. .34 - —
dms., l.c.l., same basis lb. .35 - —
tanks, same basis lb. .31½- —
Dieldrin, dms., dlvd lb. 1.85 - —
dms., l.c.l., dlvd lb. 1.90 - —
Diethanolamine, dms., c.l., dlvd. E. lb. .27 - —
dms., l.c.l., same basis lb. .28 - —
tanks, same basis lb. .24½- —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .26 - —
dms., l.c.l., frt. alld lb. .27 - —
tanks, frt. alld lb. .25 - —
Diethyl barbituric acid (see Barbital).



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Diethylbenzene—Dyes, Coaltar

Diethylbenzene, dms., t.l., frt. alld. lb. .16½- —
dms., l.t.l., same basis lb. .18½- —
Diethyl carbonate, dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., same basis lb. .48½- —
tanks, same basis lb. .45 - —
Diethyl ethanolamines, dms., c.l., dlvd. lb. .69½- —
dms., l.c.l., dlvd lb. .70½- —
tanks, dlvd. lb. .67 - —
Diethyl oxalate, dms., c.l., f.o.b. works lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Diethyl phthalate, dms., c.l., dlvd. lb. .31½- —
dms., l.c.l., dlvd lb. .32½- —
tanks, dlvd. lb. .29 - —
Diethyl sulfate, dms., c.l., works lb. .19½- —
dms., l.c.l., works lb. .20¼- —
tanks, works lb. .17½- —
Diethyl toluamide, 90-95% meta isomer, dms., c.l., t.l., works lb. 2.30 - —
5-44 dm. lots, works lb. 2.35 - —
1-4 dm. lots, works lb. 2.40 - —
Diethylamine, dms., c.l., dlvd. E. lb. .52 - —
dms., l.c.l., same basis lb. .53 - —
tanks, same basis lb. .49½- —
N,N-Diethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l., dlvd. E. lb. .17¾- —
dms., l.c.l., same basis lb. .18¾- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms., l.c.l., works lb. .52¼- —
Diethylene glycol monobutyl ether, c.l., dms., works lb. .30¾- —
dms., l.c.l., works lb. .31¾- —
tanks, dlvd. E lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, dlvd. E lb. .28¾- —
Diethylene glycol monoethyl ether, dms., c.l., dlvd. lb. .22½- —
dms., l.c.l., dlvd lb. .23½- —
tanks, dlvd. E lb. .20 - —
Diethylene glycol monoethyl ether acetate, dms., c.l., works lb. .27¼- —
dms., l.c.l., works lb. .28 - —
tanks, dlvd. E lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., dlvd. lb. .21 - —
dms., l.c.l., dlvd lb. .22 - —
tanks, dlvd. E lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd. E. lb. .44 - —
dms., l.c.l., dlvd. E lb. .45 - —
tanks, dlvd. E lb. .41½- —
Diethylstilbestrol, USP, bots., 10-kilo lots kilo. 109.60 -147.50
bots., 1-kilo lot kilo. 110.00 -152.50
Digitalis leaves, USP, dom., dms. lb. 1.30 - —
Digitoxin, USP, bots. gram. 4.60 - 4.80
Diglycol laurate, dms. lb. .32¾- .34
Diglycol stearate, dms., ton lots. lb. .33 - .38
Diglycolic acid, bgs., works lb. .14 - —
Dihexyl sebacate, dms., c.l., works. lb. .66 - —
dms., l.c.l., works lb. .67 - —
tanks, works lb. .64 - —
Dihydrazine sulfate, dms., works lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .0650- .0675
Dihydrostreptomycin sulfate, bulk, gram. .0650- .0675
1,2-Dihydroxy anthraquinone, dms., works lb. 2.75 - —
2,2-dihydroxy-3-5-dichloro-diphenyl-methane, pure, dms. lb. 2.55 - —
tech., dms. lb. 1.09 - —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd lb. .18 - —
tanks, dlvd. lb. .14½- —
Di-isobutyl phthalate, dms., c.l., dlvd. E. lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks same basis lb. .29 - —
Di-isobutylene, dms., c.l., dlvd. E. lb. .10 - —
dms., l.c.l., dlvd. E lb. .11½- —
tanks, dlvd. E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd. lb. .30½- —
dms., l.c.l., same basis lb. .31½- —
tanks, same basis lb. .28 - —
Di-iso-octyl sebacate, dms., c.l., works lb. .82 - —
dms., l.c.l., works lb. .62½- .63
tanks, works lb. .60 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼- —
dms., l.c.l., same basis lb. .24¼- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., dlvd. E. of Rockies lb. .80½- —
dms., l.c.l., same basis lb. .51½- —
tanks, same basis lb. .48 - —
Dillseed, Indian, dewhiskered, bgs. lb. .12 - —
Dillseed oil, bots. lb. 2.80 - 3.00
Dillweed oil, dom., botz., dms. lb. 3.10 - 4.10
Dimethyl anthranilate, ens. lb. 4.85 - 5.10
Dimethyl ethanolamines, anhyd., dms., c.l., dlvd. lb. 1.225 - —
dms., l.c.l., dlvd. lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70% dms. c.l., dlvd., 100% basis, contained amines lb. .68½- —
dms., l.c.l., dlvd., 100% basis lb. .69½- —
tanks, dlvd., 100% basis lb. .66 - —
Dimethyl hydroquinone, dms. lb. 1.90 - 2.20
Dimethyl phthalate, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½- —
Dimethyl sebacate, dms., c.l., works. lb. 1.31 - —
dms., l.c.l., works lb. 1.30 - —
tanks, works lb. 1.28 - —
Dimethyl sulfate, 55-gal. ret. dms., c.l., works lb. .15 - —
55-gal. ret. dms., l.c.l., works lb. .16 - —
10-gal. ret. dms., l.c.l., works lb. .16½- —
Dimethyl sulfide, dms., c.l., works. lb. .16½- —
dms., l.c.l. works lb. .17 - —
tanks, works lb. .15 - —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 - —
dms., l.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald, 100% basis lb. .28 - —
Dimethylamine, 40% soln., dms., c.l., frt. equald., 100% basis lb. .33 - —
dms., l.c.l., frt. equald, 100% basis lb. .33½- —
tanks, frt. equald, 100% basis. lb. .28 - —
N,N-Dimethylaniline, dms., c.l., frt. alld. lb. .30 - —
dms., l.c.l., frt. alld. lb. .31 - —
tanks, frt. alld. lb. .28 - —
N,N-Dimethylformamide, dms., works. lb. .34 - .39
tanks, works lb. .33 - —
2,4-Dinitroaniline, dms., frt. alld. lb. .80 - —
Dinitroaniline orange toner, CP, bbls., dlvd. E. of Rockies lb. 1.56 - —
Dinitroaniline orange toner prices 1c. higher W. of Rockies.
m-Dinitrobenzene, 85°C., dms. lb. .22 - —
99° C., dms. lb. .24 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E. lb. .15¼- —
dms., l.c.l., frt. alld. E. lb. .15¾- —
tanks, frt. alld. E. lb. .15 - —
46°C., dms., c.l., frt. alld. E. lb. .20¼- —
dms., l.c.l., frt. alld. E. lb. .20¾- —
tanks, frt. alld. E. lb. .20 - —
2,4-Dinitrophenol, bbls. lb. .37 - —
2,4-Dinitrotoluene, oily, dms. lb. .11 - —
Refd., 63°C., dms. lb. .23 - —
Dioctyl adipate, dms., c.l., works. lb. .42½- —
dms., l.c.l., works lb. .43½- —
tanks, works lb. .40 - —
Dioctyl phthalate, dms., c.l., frt. alld. lb. .30½- —
dms., l.c.l., frt. alld. lb. .31½- —
tanks, frt. alld. lb. .28 - —
Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
tanks, works. dlvd. lb. .59¼- —
1,4-Dioxane, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾- —
tanks, works lb. .28 - —
Dipentaerythritol, c.l., t.l., dlvd. E. lb. .38 - —
bgs., l.c.l., l.t.l., dlvd. E. lb. .39 - —
Dipentene, dest.-dist., dms., c.l., works. gal. .59 - —
dms., l.c.l., works gal. .63 - —
dms., l.c.l., ex whse. gal. .79 - —
tankcars, works gal. .42 - —
Dipentene, steam dist., dms., c.l., works, South. gal. .72 - —
dms., l.c.l., dlvd., New York gal. .81 - —
tanks, works, South gal. .55 - —
Dip oil (see Tar acid oil)
Diphenyl, bgs., c.l., t.l., works lb. .17¼- —
bgs., l.c.l., works lb. .19 - —
tanks, works lb. .16 - —
Diphenyl oxide, perfume grade, ens. lb. .83 - .88
Diphenyl phthalate dms., c.l., works. lb. .51¾- —
dms., l.c.l., works lb. .53¾- —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .33 - —
bgs., l.c.l., same basis lb. .35 - —
Diphenylamine, refd., fused tanks, same basis lb. .30 - —
Refd., diphenylamine in dms. ½c. per lb. higher.
Diphenylguanidine bgs., dms., ton lots, frt. alld. lb. .49 - —
bgs., smaller lots, frt. alld. lb. .50 - —
Diphenylhydantoin-sodium, USP, dms. lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld. lb. .17¾- —
dms., l.c.l., frt. alld. lb. .18¾- —
tanks, frt. alld. lb. .15¼- —
Dipropylene glycol methyl ether, dms., c.l., dlvd. E. lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.45 - —
Di-o-tolylguanidine, dms., ton lots, frt. alld. lb. .68 - —
dms., smaller lots, frt. alld. lb. .70 - —
Divi-divi, 45% tannin, bgs., bls., c.l., US ports, ex dock ton. 76.00 Nom.
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald. lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
dms., l.c.l., works, 100% basis lb. 1.05 - —
Dodecylbenzene, dms., c.l., f.o.b., works, frt. equald. lb. .14 - —
dms., l.c.l., same basis lb. .15 - —
tanks, same basis lb. .117 - —
Dodecylphenol, c.l., frt. alld. lb. .22 - —
dms., l.c.l., same basis lb. .23 - —
tanks, same basis lb. .19¼- —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:
Blue, FD&C, No. 1 lb. 15.65 -17.60
No. 2 lb. 15.65 -17.60
Green, FD&C, No 1 lb. 15.65 -17.60
No. 2 lb. 19.60 -22.85
No. 3 lb. 31.30 -35.90
Red, FD&C, No. 1, cns. lb. 5.90 - 7.85
No. 2 lb. 3.30 - 4.10
No. 3 lb. 19.60 -22.85
No. 4 lb. 5.85 - 7.50
Violet, FD&C, No. 1, cns. lb. 15.65 -17.60
Yellow, FD&C, No. 1, cns. lb. 9.15 -11.65
No. 5 lb. 3.30 - 4.10
No. 6 lb. 3.30 - 4.10

MONTROSE
CHEMICAL COMPANY

104-112 LISTER AVENUE
NEWARK, NEW JERSEY

T.C.P.—Tricresyl Phosphate

Mono Cresyl Diphenyl Phosphate

D.D.T.—Dichloro Diphenyl Trichloroethane

Ethyl Silicate 28%—40%

D.D.V.P.—Dimethyl Dichloro Vinyl Phosphate
(Minimum 95% Purity)

D.E.T.—Diethyl Toluamide
(Minimum 95% Purity)

EXCLUSIVE SALES AGENTS

R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—			
Black, D&C, No. 1	lb.	10.50	-10.95
Brown, D&C, No. 1	lb.	15.65	-16.10
Green, D&C, No. 5	lb.	15.65	-16.10
No. 6	lb.	15.65	-16.10
No. 7	lb.	14.35	-14.80
Orange, D&C, No. 3	lb.	10.50	-10.95
No. 4	lb.	19.60	-20.05
No. 5	lb.	3.80	- 4.25
Red, D&C, No. 17	lb.	10.50	-10.95
No. 18	lb.	23.60	-24.00
No. 19	lb.	15.00	-15.45
No. 21	lb.	3.90	- 4.35
No. 22	lb.	10.50	-10.95
No. 28	lb.	24.15	-24.65
No. 33	lb.	17.00	-17.45
Violet, D&C, No. 2	lb.	15.65	-16.10
Yellow, D&C, No. 7	lb.	10.50	-10.95
No. 8	lb.	10.50	-10.95
No. 10	lb.	13.05	-13.50
No. 11	lb.	13.05	-13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd:—			
Blue, Ext., D&C, No. 1, cns	lb.	15.65	-16.10
Green, Ext., D&C, No. 1, cns	lb.	15.65	-16.10
Red, Ext., D&C, No. 1, cns	lb.	13.05	-13.50
Yellow, Ext., D&C, No. 1, cns	lb.	10.50	-10.95
Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour index scale or prototype), contract, dlvd. No.			
20 Chrysoldine Y dustless	lb.	.89	- —
27 Fast light, orange 2G	lb.	1.29	- —
31 Phloxine 2G	lb.	1.05	- —
36 Yellow 2G	lb.	1.18	- —
40 Orange R, extra, conc	lb.	1.52	- —
57 Fuchsine 6B	lb.	1.55	- —
79 Scarlet 2R	lb.	1.16	- —
151 Orange AD	lb.	.79	- —
161 Orange	lb.	.94	- —
176 Fast Red A	lb.	1.39	- —
179 Rubine XX, conc	lb.	1.47	- —
180 Blue F4B	lb.	1.31	- —
185 Brilliant scarlet 3RN, conc.	lb.	1.20	- —
202 Chrome blue black R, conc.	lb.	1.07	- —
203 Chrome black T	lb.	.92	- —
208 Fast blue SR	lb.	1.30	- —
234 Brown Y	lb.	1.27	- —
246 Blue black, extra, conc	lb.	1.37	- —
275 Milling red 3R, conc	lb.	1.91	- —
289 Navy blue 3R, conc	lb.	1.70	- —
299 Black F, conc	lb.	2.19	- —
304 Neutral black 2B, conc	lb.	2.61	- —
326 Fast scarlet 4BNC	lb.	2.12	- —
332 Bismark brown RX, conc., dustless	lb.	1.37	- —
365 Brilliant yellow, conc	lb.	3.11	- —
382 Scarlet B	lb.	2.60	- —
401 Diazo black BHD	lb.	.93	- —
406 Blue 2B, extra conc	lb.	1.53	- —
419 Red FC	lb.	1.45	- —
420 Brown M	lb.	1.40	- —
448 Red 4BX, conc	lb.	1.69	- —
518 Diamine sky blue FF, extra, conc	lb.	1.95	- —
561 Brown B	lb.	2.89	- —
581 Black EB, 200%	lb.	1.33	- —
593 Green BY, conc	lb.	1.02	- —
596 Yellow brown K, extra	lb.	1.26	- —
620 Yellow 2G	lb.	1.31	- —
639 Fast Yellow GG	lb.	2.32	- —
640 Yellow XX	lb.	2.30	- —
655 Yellow OX	lb.	2.45	- —
657 Malachite green V, crystals	lb.	2.73	- —
662 Brilliant green G	lb.	3.62	- —
667 Milling green 6B, conc	lb.	4.78	- —
671 Blue EG	lb.	1.85	- —
681 Crystal violet powder	lb.	2.15	- —
698 Violet 6BN powder	lb.	2.25	- —
720 Brilliant blue BBG	lb.	2.44	- —
729 Blue B, extra conc	lb.	3.61	- —
749 Red BX	lb.	4.76	- —
800 Chinoline yellow ZSS	lb.	2.67	- —
814 Yellow NN, conc	lb.	3.67	- —
841 Safranine GF, extra, conc	lb.	4.11	- —
860 Induline base ZM	lb.	1.07	- —
865 Nigrosine J	lb.	4.76	- —
922 Blue GXX	lb.	2.22	- —
978 Black GXCF, conc	lb.	.38	- —
1034 Alizarin red SC	lb.	3.31	- —
1078 Alizarin syanine green base Z	lb.	6.13	- —
1085 Alizarin blue black B	lb.	3.02	- —
1096 Golden orange GFD, single paste	lb.	2.58	- —
1099 Dark blue BO, single paste	lb.	2.28	- —
1101 Jade green N supra, double paste	lb.	1.55	- —
1106 Blue RS double paste	lb.	3.85	- —
1113 Blue BLFD double paste	lb.	2.92	- —
1151 Brown R single paste	lb.	2.29	- —
1171 Indigo synthetic 20% paste	lb.	.31	- —
1217 Orange RD double powder.	lb.	4.60	- —
p-4 Brown PG	lb.	3.00	- —
p-24 Gray L	lb.	2.08	- —
p-80 Diazo brilliant scarlet ROAD	lb.	3.62	- —
p-202 Diazo black VJ conc	lb.	2.48	- —
p-244 Brilliant scarlet BN	lb.	1.70	- —
p-313 Naphthol SWF	lb.	1.76	- —
Dyes coaltar oil-soluble, 100-lb drums dlvd. No.			
24 Oil orange Z-7078	lb.	1.06	- —
73 Oil Scarlet BL	lb.	1.70	- —
1073 Oil violet ZIRS	lb.	6.81	- —
1078 Alizarin green CG	lb.	3.53	- —
1080 Oil violet special Z	lb.	6.81	- —
Oil black ZBC	lb.	4.46	- —
Oil black ZBD	lb.	3.03	- —
Oil black ZHH	lb.	4.61	- —
Oil black ZMM	lb.	6.52	- —
Oil blue ZN	lb.	8.02	- —
Oil blue ZV	lb.	4.95	- —
Oil orange ZMG	lb.	1.32	- —
Oil red N-1700	lb.	1.76	- —
Oil yellow ZG conc	lb.	6.33	- —
Dyes, coaltar spirit soluble 100 lb. dms. dlvd. No.			
p-517 Spirit yellow 2R conc	lb.	4.62	- —
p-520 Spirit orange ZR conc	lb.	5.87	- —
Spirit black RB	lb.	3.54	- —
Spirit brown ZG	lb.	5.30	- —
Spirit red B conc	lb.	6.41	- —

E

Echinacea root, bls	lb.	1.10	- —
Egg albumin (see Albumin).			
Egg yolk, dried, dom., bbls.	lb.	1.20	- 1.22
tanners, bbls.	lb.	.06	- .06½
Elm bark, grinding bls.	lb.	.30	- .32
Powd., bbls., bxs.	lb.	.45	- —
Select, bundles	lb.	.75	- —
Emetine hydrochloride, USP, bots.	oz.	42.00	-48.25
Endrin, tech., dms., t.l., dlvd.	lb.	3.44	- —
Eosin red toner, bbls., works	lb.	1.85	- —
Ephedrine, syn., USP, anhyd., bots. 100-oz. lots	oz.	.98	- 1.00
hydrous bots. 100-oz. lots	oz.	.92	- —
Ephedrine hydrochloride, NF, dms.,	oz.	.60	- .65
Ephedrine sulfate, USP, cryst., dms.,	oz.	.60	- .80
Powd., dms.	oz.	.60	- .80
Epichlorohydrin, dms., c.l., dlvd.	lb.	.35½	- —
dms., l.c.l., dlvd.	lb.	.36½	- —
tanks, dlvd	lb.	.33	- —
1-Epinephrine base syn. USP bots., 100 gram lots	gram.	.58	- —
Epsom salt (see Magnesium sulfate).			
Erigeron oil, cns.	lb.	11.00	- —
Ergot, NF dms., tin-lined	lb.	1.60	- —
Eserine salicylate, bots.	oz.	72.50	-84.00
Eserine sulfate, bots.	oz.	87.75	- —
1-Epinephrine base, syn., USP bots.,			
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va.	lb.	.17	- —
Ester gum wood-rosin type, dms., c.l., same basis	lb.	.17	- —
Ether (see specific product).			
Ethyl acetate, nat., ferment, 85-88% dms., c.l., frt. alld	lb.	.15	- —
dms., l.c.l., dlvd.	lb.	.16	- —
tanks, dlvd.	lb.	.12½	- —
95-98%, dms., c.l., dlvd.	lb.	.15¼	- —
dms., l.c.l., dlvd.	lb.	.16¼	- —
tanks, dlvd.	lb.	.12¾	- —
99%, dms., c.l., dlvd.	lb.	.15½	- —
dms., l.c.l., dlvd.	lb.	.16½	- —
tanks, dlvd.	lb.	.13	- —
Syn., 85-88%, dms., c.l., dlvd	lb.	.15	- —
dms., l.c.l., dlvd.	lb.	.16	- —
tanks, dlvd.	lb.	.12½	- —
95-98%, dms., c.l., dlvd.	lb.	.15¼	- —
dms., l.c.l., dlvd.	lb.	.16¼	- —
tanks, dlvd.	lb.	.12¾	- —
99% dms., c.l., dlvd	lb.	.15½	- —
dms., l.c.l., dlvd.	lb.	.16½	- —
tanks, dlvd.	lb.	.13	- —
Ethyl acetoacetate, dms., c.l., dlvd.	lb.	.58½	- —
dms., l.c.l., dlvd.	lb.	.59½	- —
tanks, dlvd.	lb.	.56	- —
Ethyl acrylate, dms., c.l., t.l., dlvd	lb.	.36	- —
dms., l.t.l., dlvd.	lb.	.37	- —
tanks, dlvd.	lb.	.34	- —
Ethyl alcohol, 190 pf., USP, tax paid dms., c.l., dlvd. E. of Rockies	gal.	20.38	- —
dms., l.c.l., same basis	gal.	20.63	-20.69
tanks, same basis	gal.	20.42	- —
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E. of Rockies	gal.	.63	- —
dms., l.c.l., same basis	gal.	.68	- .74
tanks, same basis	gal.	.47	- —
Ethyl alcohol, absolute, 200 pf. tax paid, dms., dlvd. E. of Rockies	gal.	21.70	- —
dms., l.c.l., same basis	gal.	21.75	-21.81
tanks, same basis	gal.	21.54	- —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).			
Ethyl aminobenzoate, USP (see Benzocaine).			
Ethyl amyl ketone, dms., c.l., dlvd.	lb.	.20	- —
dms., l.c.l., same basis	lb.	.21	- —
tanks, same basis	lb.	.17½	- —
Ethyl benzoate, bots.	lb.	.90	- —
Ethyl bromide tech., 98% dms., c.l., frt. alld.E	lb.	.43	- —
dms., l.c.l., frt. alld. E	lb.	.45	- —
tanks, frt. alld. E.	lb.	.41	- —
2-Ethyl butyl alcohol, dms., c.l., works	lb.	.30	- —
dms., l.c.l., works	lb.	.30¾	- —
tanks, works	lb.	.28	- —
Ethyl butyl ketone, dms., c.l., t.l., works	lb.	.36	- —
dms., l.c.l., l.t.l., works	lb.	.36¾	- —
tanks, works	lb.	.34	- —
Ethyl butyrate, works	lb.	.90	- 1.00
Ethyl carbamate (see Urethane).			
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, frt. alld. E	lb.	.73	- —
bgs., smaller lots, frt. alld. E	lb.	.75	- —
Ethyl cellulose, vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E.	lb.	.68	- —
bgs., smaller lots, frt. alld. E.	lb.	.70	- —
Ethyl chloride, tech., cyls., works.	lb.	.20	- .22
dms., works	lb.	.18	- .20
tanks, works	lb.	.10	- —
Ethyl cinnamate, cns.	lb.	3.35	- 3.50
Ethyl ethanolamines, mixed, dms., c.l., dlvd. E	lb.	.43½	- —
dms., l.c.l., dlvd. E	lb.	.44½	- —
tanks, dlvd. E.	lb.	.41½	- —
Ethyl ether, absolute, ACS dms	lb.	.27	- —
Anesthesia, USP, dealers, 1-lb. cns	lb.	1.01	- —
½-lb. cns.	lb.	1.09	- —
¼-lb. cns.	lb.	1.21	- —
Ethyl ether, indust. dms., c.l., dlvd.	lb.	.13½	- —
dms., l.c.l., dlvd. E.	lb.	.14½	- —
tanks, dlvd. E.	lb.	.11	- —
2-Ethyl hexoic acid dms., c.l., t.l., dlvd. E	lb.	.37	- —
dms., l.c.l., l.t.l., dlvd. E.	lb.	.38	- —
tanks, dlvd. E	lb.	34½	- —
(2-Ethyl hexoic acid, 1c. higher W. of Rockies).			

Mathieson Organic Chemicals

Ethylene Oxide
Ethylene Glycol
Diethylene Glycol
Triethylene Glycol
Polyethylene Glycols
(Poly-G's)
Glycol Ether Solvents
(Poly-Solv's)
Ethanolamines
Ethylene Diamine
Polyamines
Surfactants
(Poly-Tergents)
Ethylene Dichloride
Dichloroethylether

...completely dependable...readily available

The consistently uniform high quality of Mathieson organics stems from a rigid system of quality controls...from basic raw materials right through to finished product.

The ready availability of Mathieson organic chemicals results from... complete facilities at our modern plant in Brandenburg, Kentucky...a high-speed communications system linking production and sales personnel...a fast-moving fleet of transportation equipment.

Mathieson organic chemicals are shipped in tank car, tank truck, or by barge directly from the plant; or, in bulk and drums, from strategically-located stocks maintained throughout the country.

Write today for information, data sheets, samples or technical assistance.

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OLIN MATHIESON CHEMICAL CORPORATION

ORGANIC CHEMICALS OLIN MATHIESON CHEMICAL CORPORATION
745 FIFTH AVENUE, NEW YORK 22, NEW YORK

5951

2-Ethylhexyl Acrylate—Geranium Oil

2-Ethylyhexyl acrylate, c.l. or t.l., straight or mixed frt. alld. E. lb. .47½- —
dms., l.t.l., same basis lb. .48½- —
tanks, same basis lb. .45 - —
Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
2-Ethylhexyl alcohol dms. c.l. dlvd. lb. .23¾- —
dms., l.c.l., dlvd. lb. .24¾- —
tanks, dlvd. lb. .21¼- —
Ethyl iodide, cbys., works lb. 3.30 - —
Ethyl methacrylate, dms., c.l., frt. equald. lb. .52 - —
dms., l.t.l. frt. equald. lb. .52½- —
tanks, frt. equald. lb. .50 - —
Ethyl morphine hydrochloride, USP, bots. oz. 11.85 - —
Ethyl nitrite (see Nitrous ether).
Ethyl oenanthate, dms. lb. 1.20 - 1.50
Ethyl oxalate (see Diethyl oxalate).
Ethyl silicate dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available SiO_2, dms., c.l., dlvd. lb. .44½- —
dms., l.c.l., dlvd. lb. .45½- —
tanks, dlvd. lb. .42 - —
N-Ethyl-a-naphthylamine, dms., works. lb. 1.02 - —
N-Ethyl-o-toluidide, bbls. lb. .88 - —
Ethylamine (see Mono-, Di-, or Tri-).
N-Ethylaniline dms. c.l. frt. alld. lb. .57 - —
dms., l.c.l. frt. alld. lb. .58 - —
tanks, frt. alld. lb. .55 - —

Ethylbenzene, 99% dms. c.l. or t.l., frt. equald. lb. .15 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .12½- —
2-Ethylbutyl alcohol, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾- —
Ethylene, contract, ref'y. gate lb. .0475- .0525
Ethylene dibromide dms. c.l., frt. equald. lb. .30½- —
dms., l.c.l. frt. equald. lb. .31½- —
tanks, frt. equald. lb. .28½- —
Ethylene dichloride dms., c.l., dlvd. lb. .11½- —
dms., l.c.l., same basis lb. .12½- —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Ethylene glycol indust. dms., c.l., dlvd. E. lb. .16 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E. lb. .22 - —
dms., l.c.l., dlvd. E. lb. .23 - —
tanks, dlvd E. lb. .19½- —
Ethylene glycol monoethyl ether, dms. c.l. dlvd. E. lb. .21 - —
dms. l.c.l., dlvd. E. lb. .22 - —
tanks, dlvd. E. lb. .18½- —
Ethylene glycol monoethyl ether, acetate dms. c.l. dlvd. E. lb. .19½- —
dms., l.c.l., dlvd. E. lb. .20½- —
tanks, dlvd E. lb. .17 - —

Ethylene glycol monomethyl ether, dms., c.l., dlvd. E. lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22 - —
tanks, dlvd E. lb. .18½- —
Ethylene glycol monomethyl ether, acetate dms. c.l. dlvd. E lb. .29 - —
dms., l.c.l., dlvd. E. lb. .29¾- —
tanks, dlvd. E. lb. .27 - —
Ethylene glycol monostearate, triple pressed dms. lb. .33 - .35
Ethylene oxide, dms. c.l., dlvd. E. lb. .21½- —
dms., l.c.l., dlvd. E. lb. .24½- —
tanks, dlvd. E. lb. .15½- —
Ethylene trichloride (see Trichloroethylene).
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 - —
dms. l.c.l. dlvd. E. 100% basis. lb. .43 - —
tanks, dlvd. E. 100% basis lb. .40 - —
Ethylvanillin 100-lb fib. dms. 500-lb. lots and over lb. 6.75 - —
Eucalyptol, USP, cns., dms. lb. 1.10 - 1.40
Eucalyptus oil, NF, rectified, 70-75%, dms. lb. .61 - 1.05
NF, rectified, 80-85%, dms. lb. .68 - 1.20
Eugenol, USP, dms. lb. 1.60 - 2.25
Euphorbia herb bls. lb. .15 - .17

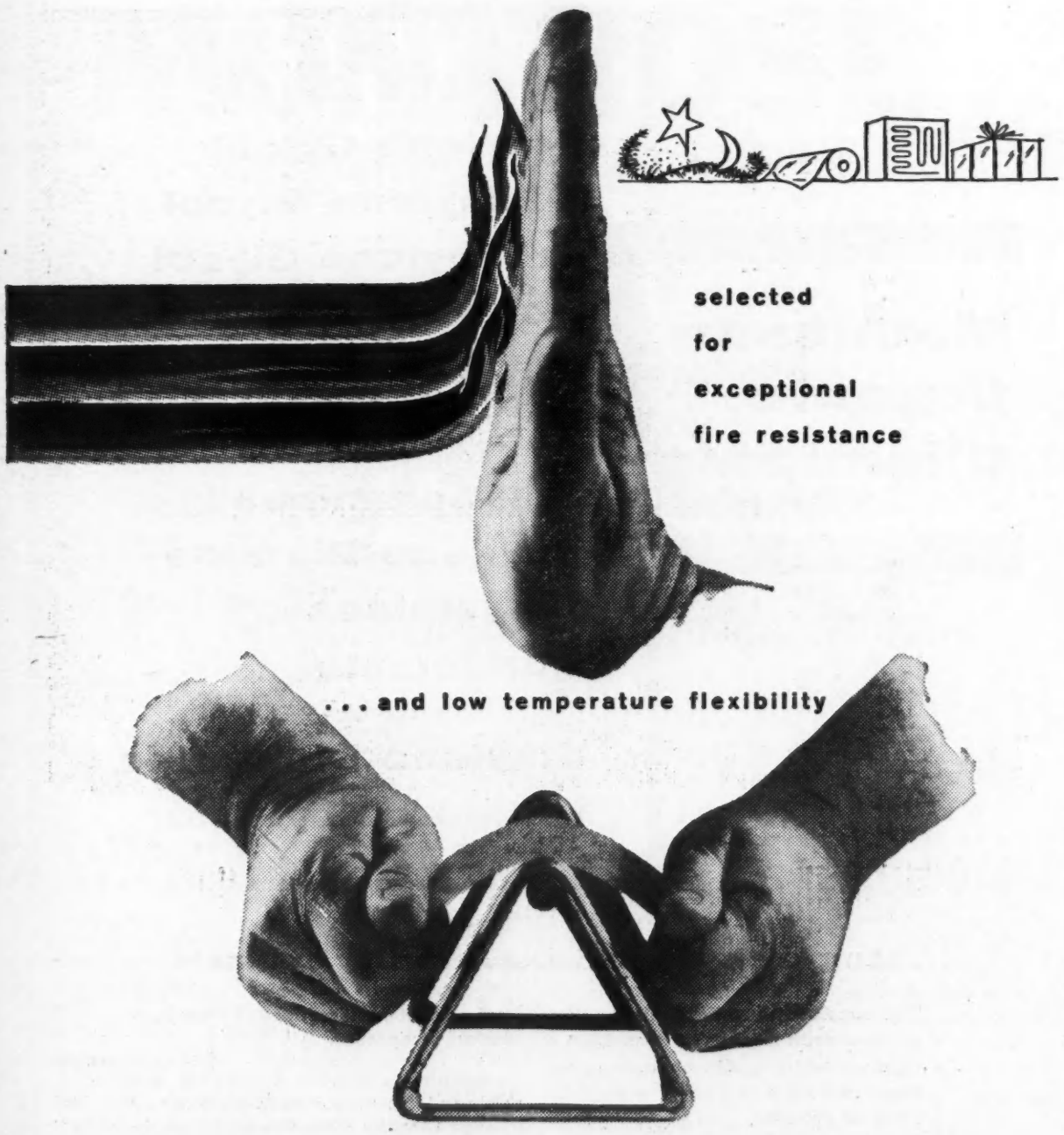
F

F acid, crude, paste, bbls., works. lb. 2.10 - —
Feldspar, 140-200 mesh, bulk, c.l., works ton. 19.50 - —
Feldspar in bags $3 per ton. higher.
Fennel oil, sweet USP, cns. lb. 2.75 - 2.95

Fennel seed, Argentine, bgs. lb. .14½- —
French, light, bgs. lb. .21 - —
Indian, light, bgs. lb. .20 - —
Rumanian, bgs. lb. .13 - —
Yugoslav, light, bgs. lb. .23 - —
Fenugreek seed, Moroccan, bgs. lb. .07¾- —
Ferric acetate, soln., USP IX, cbys. lb. .16 - —
USP IX, cbys. lb. .17 - —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms. l.c.l., works 100 lbs. 8.50 - —
Indust., cryst., bbls., c.l., works. 100 lbs. 5.25 - 6.75
bbls., l.c.l., works 100 lbs. 5.75 - 7.25
Ferric chloride, 42° Be. photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade, tanks, frt. equald. 100% basis 100 lbs. 4.00 - —
USP, cryst. dms., works lb. .07½- .09
Ferric citrate, gran., dms. lb. .86 - —
Ferric hypophosphite NF dms lb. 3.45 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼- —
Ferric oxalate, gran., dms. lb. .89 - .91
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble, gran. pearls, cs lb. .64 - .67
Ferric pyrophosphate, NF, VII, soluble, gran., pearls, dms. lb. .79 - —
Ferric resinate 6¾% Fe., dms. ton. lots, frt. alld lb. .36½- —
Ferric stearate, dms., c.l., frt. alld. lb. .39 - —
dms., l.c.l., frt. alld. lb. .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l. works ton. 35.25 - —
bgs., l.c.l., works ton. 36.25 - 42.25
bulk, c.l., works ton. 33.25 - —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 - .68
Green, pearls, USP XII, gran., dms lb. .66 - .69
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., dms lb. .32½- .34½
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½
Ferrous gluconate, USP, dms. lb. .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton. 34.50 - —
bgs., l.c.l., dlvd. Metropolitan area, 100 lbs. 3.25 - 4.25
bbls., c.l., works ton. 40.00 - —
bulk, c.l., works ton. 27.00 - —
USP cryst., bbls., dms. lb. .09½- .10
Fir balsam, Canada, bbls. gal. 32.00 - 35.00
Oregon, bbls. gal. 3.75 - 4.00
Fir oil, Canada, cns. lb. 2.85 - 4.00
Fish oil, refd., alkali, dms. lb. .1350- .1400
Kettle-bodied, dms. lb. .1580- .1630
Light-pressed, dms. lb. .1200- .1250
tanks lb. .1050- —
Fishliver oil, high potency, 100,000 A units per gram, dms. 1,000,000 units. .16 - —
200,000 A units per gram., dms. 1,000,000 units. .17½- —
500,000 A units per gram., dms., 1,000,000 units. .18 - —
Fishmeal, dom., menhaden 60% protein grd., bgs., Chesapeake Bay area ton. 138.00 - 140.00
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Chesapeake Bay area ton. 134.00 - 136.00
Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib., dms., 20-kilo lots or more gram. .48 - —
10% feed grade, fib. dms., 10 kilos or more kilo. 48.00 - —
Formaldehyde, 37%, (inhibited 7 to 8% methanol), USP, dms., c.l., dlvd. lb. .0645- —
tanks, dlvd. lb. .0380- —
Formaldehyde, 37%, (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd. lb. .0670- —
tanks, dlvd. lb. .0405- —
Methanol-free (uninhibited), tanks, dlvd lb. .0350- —
Formic acid, 85%, cbys., c.l., works. lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, bls. lb. .60 - .61
Fuller's earth, bgs., c.l., Ill. mines, ton. 19.00 - —
Calcined, bgs., c.l., same basis. ton. 20.00 - 21.75
Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines ton. 17.50 - —
Oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton. 16.30 - 17.00
200-mesh, bgs., c.l., same basis, ton. 17.50 - 18.00
Spent, bgs., c.l., ship't. point ton. 4.50 - 5.00
Fumaric acid, tech., bgs., dms., c.l., frt. alld. E. lb. .27¼- —
bgs., l.c.l., same basis lb. .28¼- —
Prices of fumaric acid 1½c. per lb. higher west of Denver.
Furfural, dms., c.l., works lb. .13 - —
dms., l.c.l., works lb. .14 - —
tanks, dlvd. E. lb. .12 - —
tanks, dlvd. W. lb. .13 - —
dms., c.l., Memphis, Tenn. lb. .20 - —
Furfuryl alcohol, cns., works lb. .29 - —
dms., l.c.l., Memphis, Tenn. lb. .30 - —
Furfuryl alcohol, dms., c.l., Newark, N. J. lb. .21½- —
dms., l.c.l., Newark, N. J. lb. .22½- —
tanks, Memphis, Tenn. lb. .184 - —
Fusel oil, refd., dms., c.l., dlvd. lb. .18 - —
dms., l.c.l., dlvd. lb. .19 - —
tanks, dlvd. lb. .15½- —
Fustic extract cryst. No. 1, bbls., l.c.l. lb. .47½- —
No. 2, bbls., l.c.l. lb. .45½- —
No. 3, bbls., l.c.l. lb. .43½- —
Liq., No. 1, bbls., l.c.l. lb. .22½- —
No. 2, bbls., l.c.l. lb. .21½- —
No. 3, bbls., l.c.l. lb. .19 - —
Solid, No. 1, bxs., l.c.l. lb. .45 - —

G

G salt, bbls., frt. alld., 100% basis lb. .73 - —
Gallic acid, NF VII, bbls., 1,000-lb. lots lb. 2.00 - —
bbls., smaller lots lb. 2.02 - 2.22
Gallic acid, tech., bbls., 1,000-lb. lots lb. 1.78 - —
bbls., smaller lots lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld. lb. 1.50 - —
Paste, bbls., frt. alld. lb. 1.45 - —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. oz. 4.75 - 6.05
Imp., bots. oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, pure pork skin), 75 AOAC test, bbls., c.l. lb. .55 - —
150 AOAC test, bbls., c.l. lb. .67 - —
200 AOAC test, bbls., c.l. lb. .74 - —
225 AOAC test, bbls., c.l. lb. .77 - —
275 AOAC test, bbls., c.l. lb. .84 - —
Gelsemium root, bls. lb. .26 - —
Gentian root, bls. lb. .23 - —
Grd., bbls., bxs. lb. .27 - —
Powd., bbls., bxs. lb. .28 - —
Geraniol, extra, cns., dms. lb. 2.50 - 3.00
Standard, cns., dms lb. 2.20 - 3.40
Geranium oil, Algerian, cns. lb. 16.50 - 18.50
Bourbon, cns. lb. 18.00 - 22.75
Geranium oil, Turkish (see Palmarosa oil).



Flame-retardant Celluflex CEF imparts desirable improvements to the physical properties of polyvinyl emulsion systems used for protective coatings, adhesives and textile coatings. Fire retardance, ultra-violet light stability, and low temperature flexibility are imparted to these applications by this efficient tris-B-chlorethyl phosphate plasticizer. In adhesives, it also displays an exceptional tackifying property.

Celanese is an expanding source for plasticizers for many jobs. Shipments from convenient distribution points are ready to meet tight schedules. Write Celanese Corporation of America, Chemical Division, 180 Madison Avenue, New York 16, for complete information. Export Sales: Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Avenue, New York 16, N. Y.

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Celluflex CEF... a Celanese plasticizer

CHEMICALS

Call Celanese for: Tris-beta Chlorethyl Phosphate . . . *CELLUFLEX CEF;* Epoxy Plasticizers . . . *CELLUFLEX 21 and 23;* Four grades of flame-retardant Tricresyl Phosphate . . . *LINDOL (low color)* . . . *CELLUFLEX 179A (low specific gravity)* . . . *CELLUFLEX 179C (general purpose grade)* . . . *CELLUFLEX 179EC (electrical grade);* Cresyl Diphenyl Phosphate . . . *CELLUFLEX 112;* Dibutyl Phthalate . . . *CELLUFLEX DBP;* Dioctyl Phthalate . . . *CELLUFLEX DOP;* Triphenyl Phosphate . . . *CELLUFLEX TPP.*

Geranyl acetate, cns.	lb.	2.20 - 2.70
Ginger oil, dist., bots.	lb.	11.00 -16.00
Ginger oleoresin, NF, from African root, bots.	lb.	5.00 - 5.60
NF, from Jamaican root, bots.	lb.	8.75 -10.00
Ginger root, Cochin, bgs.	lb.	.15 - —
Jamaican, No. 3, bgs.	lb.	.34 - —
Nigerian, split, bgs.	lb.	.13½- —
Sierra Leone, bgs.	lb.	.15 - —
Glauber's salt (see Sodium sulfate).		
Glucnoic acid, tech., 50%, dms., frt. alld.	lb.	.18 - —
dms. l.c.l., frt. alld.	lb.	.20½- —
tanks, frt. alld.	lb.	.13½- —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs. c.l., dlvd.	lb.	.15 - —
131 jellygrams, bgs., c.l., same basis	lb.	.17 - —
164 jellygrams, bgs., c.l., same basis	lb.	.17½- —
191 jellygrams, bgs., c.l., same basis	lb.	.19 - —
222 jellygrams, bgs., c.l., same basis	lb.	.22 - —
Glue, bone, green, dry bone, 40 jellygrams, bgs., c.l., same basis	lb.	.16 - —
65 jellygrams, bgs., c.l., same basis	lb.	.16 - —
86 jellygrams, bgs., c.l., same basis	lb.	.16 - —
115 jellygrams, bgs., c.l., same basis	lb.	.16½- —
135 jellygrams, bgs., c.l., same basis	lb.	.17½- —
164 jellygrams, bgs., c.l., same basis	lb.	.18½- —
180 jellygrams, bgs., c.l., same basis	lb.	.19½- —
200 jellygrams, bgs., c.l., same basis	lb.	.20½- —
Bone glue, l.c.l., prices 1c higher.		
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd.	lb.	.16 - —
95-121, bgs., c.l., dlvd.	lb.	.17 - —
122-149, bgs., c.l., dlvd.	lb.	.18½- —
150-177, bgs., c.l., dlvd.	lb.	.21 - —
178-206, bgs., c.l., dlvd.	lb.	.23½- —
207-236, bgs., c.l., dlvd.	lb.	.26 - —
237-266, bgs., c.l., dlvd.	lb.	.28 - —
267-298, bgs., c.l., dlvd.	lb.	.30 - —
299-330, bgs., c.l., dlvd.	lb.	.32 - —
331-362, bgs., c.l., dlvd.	lb.	.34 - —
363-394, bgs., c.l., dlvd.	lb.	.36 - —
395-427, bgs., c.l., dlvd.	lb.	.38 - —
428-460, bgs., c.l., dlvd.	lb.	.40 - —
461-494, bgs., c.l., dlvd.	lb.	.42 - —
495-529, bgs., c.l., dlvd.	lb.	.44 - —
Hide glue, l.c.l., prices 2c higher.		
1-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld	lb.	2.00 - —
fib. dms., 25-lb. lots, frt. alld.	lb.	2.05 - —
1-Glutamine, bots., 100 gm. lots. gram		.45 - —
Glycerine, dom., nat., crude, saponification, 88%, dlvd. E., tanks	lb.	.18½- —
nat., crude, soaplye, 80%, dlvd. E., tanks	lb.	.16½- .17
Imp., nat., crude, soaplye, 80%, c.i.f.	lb.	.17 - —
Glycerine, nat., refd., USP, CP, 98%, dms., c.l., dlvd.	lb.	.29⅜- —
dms., l.c.l., dlvd.	lb.	.29⅞- —
tanks, dlvd.	lb.	.27⅜- —
USP, 96%, dms., c.l., dlvd.	lb.	.28½- —
dms., l.c.l., dlvd.	lb.	.29 - —
tanks, dlvd.	lb.	.26¾- —
Glycerine, high gravity, dms., c.l., dlvd.	lb.	.29¼- —
dms., l.c.l., dlvd.	lb.	.29¾- —
tanks, dlvd.	lb.	.27½- —
Glycerine, syn., dms., c.l., dlvd.	lb.	.29½- —
dms., l.c.l., dlvd.	lb.	.30 - —
tanks, dlvd.	lb.	.27¾- —
Glycine (see Aminoacetic acid).		
Glycerol (see Glycerine).		
Glycolic acid (see Hydroxyacetic acid).		
Glyoxal, 30%, dms., c.l., works	lb.	.20½- —
dms., l.c.l., works	lb.	.21¼- —
tanks, works	lb.	.18 - —
Golden seal root, NF, tested, bls.	lb.	4.10 - —
Grapefruit oil, dms.	lb.	1.95 - 2.75
Graphite amorph, powd., bgs., fib. dms., ex whse	lb.	.06 - .09½
Graphite, amorph., cryst., 88-90%, powd., bgs., fib. dms. ex whse	lb.	.19 - .21½
90-92%, powd., bgs., fib. dms., ex whse	lb.	.21 - .24½
95-97%, powd., bgs., fib. dms., ex whse	lb.	.29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse	lb.	.29 - .31
Flake, No. 2, 90-95%, bgs., fib. dms., ex whse	lb.	.29 - .31
Grease, white, choice all hog, tanks, dlvd.	lb.	.08¼- .08¼
Yellow, tanks, dlvd.	lb.	.06⅞- .07
Grease oil, No. 1, dms., c.l.	lb.	.15¾- —
dms., l.c.l.	lb.	.16¾- .18¾
extra winter, strained, dms., c.l.	lb.	.18¼- —
dms., l.c.l.	lb.	.19¼- .21¼
prime, burning, dms., c.l.	lb.	.19¾- —
dms., l.c.l.	lb.	.20¾- .22¾

Green Pigments

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls	lb.	.45 - —
Guaiacol, NF, cryst. dms., tins	lb.	2.10 - 2.15
NF liq. cbys., dms.	lb.	2.30 - 2.40
Guaiacol carbonate, NF, VII, dms.	lb.	3.40 - 3.45
Guaiacwood oil, cns.	lb.	.85 - 1.50
Guar gum, food grade, bgs., c.l.	lb.	.38 - .44
bgs., 5,000 lbs. or more	lb.	.39 - .44
Tech. grade, bgs.	lb.	.30 - .33

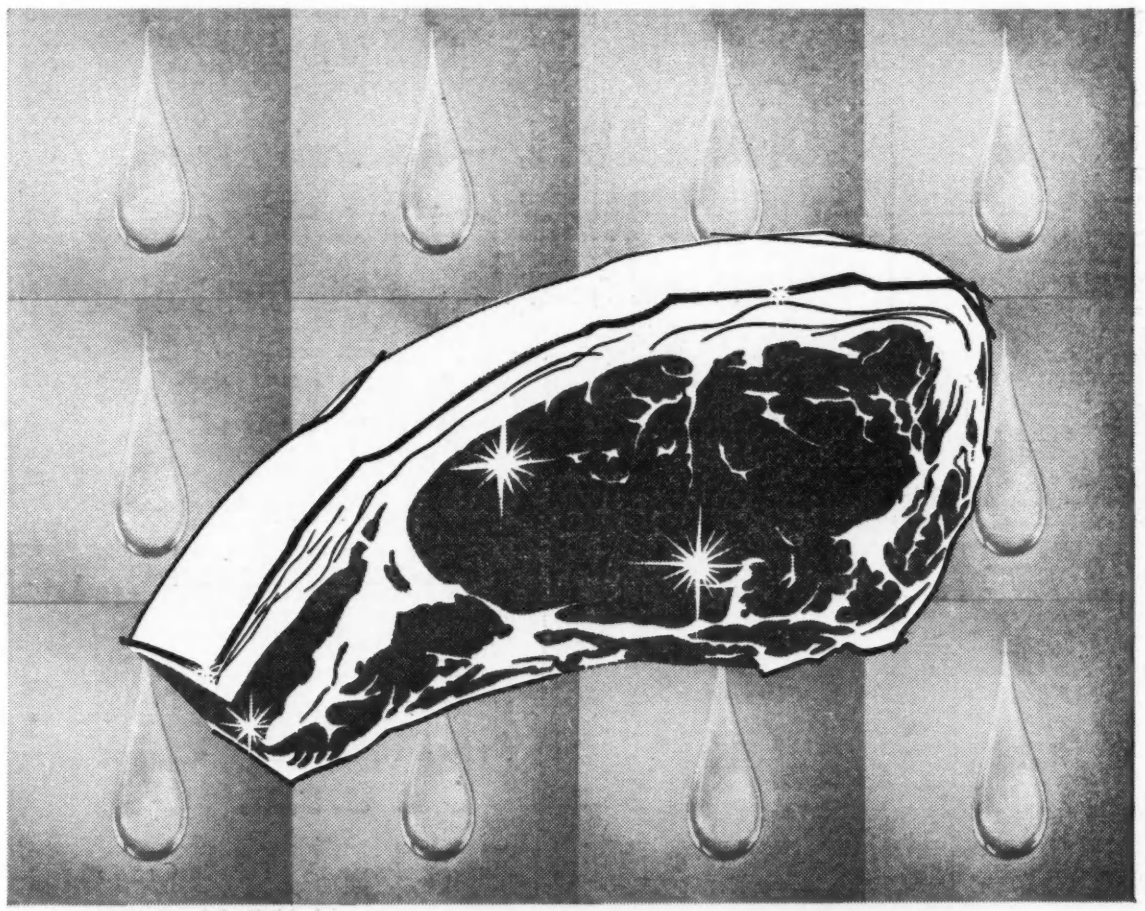
Gums

Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb. paper bgs., trucks, dlvd. New York	ton.	20.30 - —
Gypsum, terra alba, dom., 100-lb. paper bgs., trucks, same basis	ton.	20.00 - —
100-lb. paper bgs., trucks, works, New York	ton.	17.00 - —
Imp., English, 100-lb. paper bgs., ex dock, New York	ton.	55.00 - —
100-lb paper bgs., ex whse.	ton.	60.00 -62.00

H

H acid, dry, bbls., c.l., frt. alld., 100% basis	lb.	.90 - —
bbls., l.c.l., same basis	lb.	.95 - —
Hansa yellow, 10 G, bbls., dlvd. E. of Rockies	lb.	2.45 - —
Hansa G yellow, pigment, bbls.	lb.	2.20 - —
Hawthorn berries, bgs.	lb.	.21 - —
Heliotropin, 100-lb. lots, dms.	lb.	2.50 - 3.00
Hellebore root, dom., green, bls.	lb.	.70 - .75
Helonias root, bls.	lb.	1.75 - 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l.	lb.	.47 - —
No. 2, bbls., l.c.l.	lb.	.43 - —
No. 3, bbls., l.c.l.	lb.	.41 - —
No. 4, bbls., l.c.l.	lb.	.39 - —
No. 5, bbls., l.c.l.	lb.	.37 - —
Paste, No. 1, bbls., l.c.l.	lb.	.20½- —
Hemlock oil, cns.	lb.	2.85 - 3.55
Henbane leaves, bls.	lb.	.35 - .40
Heptachlor, dms., c.l., t.l., 100% basis, frt. alld	lb.	.90 - —
Heptane, indust., tanks, Bayonne, N. J	gal.	.20 - —
tanks, Baytown, Tex.	gal.	.16¼- —
tanks, Borger, Tex.	gal.	.16¼- —
tanks, Houston, Tex.	gal.	.16¼- —
Hesperidin, purif., 100-lb. fib. dms., f.o.b., works	lb.	8.95 - —
Hesperidin methylchalcone, bots., 50-lb. lots, works	lb.	22.50 - —
bots., 5-lb. lots, works	lb.	23.00 - —
bots., 1-lb lots, works	lb.	23.50 - —
Hexachlorophene, dms.	lb.	1.94 - —
Hexalin (see Cyclohexanol).		
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York	lb.	.233 - —
Hexamethylenetetramine, tech., bgs., 1,000-19,999-lb. lots, same basis.	lb.	.243 - —
bgs., smaller lots, same basis.	lb.	.253 - —
fib. dms., 1,000-lb. lots or more, same basis	lb.	.250 - —
fib. dms., smaller lots, same basis	lb.	.253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York and Philadelphia	lb.	.42½- —
bgs., smaller lots, same basis	lb.	.43½- .48½
Hexane, indust., tanks, Bayonne, N. J	gal.	.20 - —
tanks, Borger, Tex., dlvd.	gal.	.16 - —
tanks, Houston, Tex.	gal.	.16 - —
1-Hexanol, dms., c.l., works	lb.	.35 - —
dms., l.c.l., works	lb.	.35¾- —
tanks, works	lb.	.33 - —
Hexyl cinnamic aldehyde, dms	lb.	4.00 - 7.50
n-Hexyl methacrylate, dms., c.l., works	lb.	.75½- —
dms., l.c.l., works	lb.	.76 - —
Hexyl salicylate, dms.	lb.	1.75 - —
Hexylene glycol, dms., c.l., dlvd	lb.	.17½- —
dms., l.c.l., dlvd.	lb.	.18½- —
tanks, dlvd.	lb.	.15 - —
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd	lb.	14.00 - —
dms., smaller lots, dlvd.	lb.	14.50 - —
Homatropine hydrobromide, USP, bots	oz.	3.00 - —
Homatropine methylbromide, USP, bots.	oz.	3.90 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton.		6.25 - —
Horehound herb, bls.	lb.	.16 - .19
Hydrastis (see Goldenseal).		
Hydrazine hydrate, 85% ret. dms., works	lb.	1.35 - 1.55
100%, ret. dms., works	lb.	1.60 - 1.90
Hydriodic acid, 1.50 s.g., cbys.	lb.	2.92 - —
1.70 s.g. cbys.	lb.	3.23 - —
Hydroabietyl alcohol tech., solid, dms., c.l., dlvd. zone 1	lb.	.29¼- —
dms., l.c.l., dlvd. zone 1	lb.	.29¾- .30¼
tanks, dlvd. zone 1	lb.	.27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.		
Hydrobromic acid, medicinal, 48%, cbys., dlvd. E	lb.	.37 - .43
Hydrochloric acid, anhyd. (see Hydrogen chloride)		
Hydrochloric acid 18° cbys., c.l., works 100 lbs.		2.50 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		2.90 - 3.05
tanks, works, frt. equald	ton.	28.00 - —
20°, cbys., c.l., works 100 lbs.		2.75 - —
cbys., l.c.l., dlvd. Metropolitan area 100-lbs.		3.15 - —
tanks, works frt. equald	ton.	30.00 - —
22°, cbys., c.l., works 100 lbs.		3.25 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		3.65 - —
tanks, works frt. equald	ton.	35.00 - —
CP, USP, consumers cbys. extra c.l. works	lb.	.15¾- —
cbys., l.c.l., same basis	lb.	.17¼- .17¾



A "liquid dip" for wrapping meat

A more attractive way of packaging frozen meat is now being tested. It's an all-around airtight wrap that seals in fresh red color that's ordinarily lost after freezing. The process is simple: An initial immersion in an ethyl cellulose base hot melt followed by a liquid dip in the insulating coating of which one of the ingredients is glycerine. The glycerine acts as a plasticizer and humectant. It helps keep the package clear and prevent slip.

Another approach is described in a recent Belgian patent. This time a dip of hot 60-80% Glycerine solution heat-seals polyethylene into an airtight film around the meat.

Ideas like these can be extended throughout the whole world of packaging. They're examples of the many things to come with Glycerine. And more, the unique balance of properties that won such wide acceptance for Glycerine in the past will surely continue to open new doors to chemical progress.

We'd like to send you our 18-page booklet: "Glycerine Properties and Uses." Address your request to the Glycerine Producers' Association.

Properties
HYGROSCOPICITY • STABILITY
SOLVENT POWER • VISCOSITY
NONVOLATILITY • NONTOXICITY
TASTE • COMBINING WEIGHT

ADVANTAGES THAT COME WITH . . .
Glycerine

Applications
HUMECTANT • CARRIER
SOLVENT • LUBRICANT
SOFTENER • EMOLLIENT
ANTI-FREEZE • ALKYD BASE

GLYCERINE PRODUCERS' ASSOCIATION • 295 MADISON AVENUE, NEW YORK 17, N. Y.

Hydrochloric Acid—Lactic Acid

Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis..lb. .20¼- —
5-pint bots., extra cs., c.l., same basis..lb. .20¼- —
Hydrocortisone acetate, bulk, bots., kilo lots or more..gram. 2.90 • —
Hydrocortisone alcohol, bulk, bots., kilo lots or more..gram. 2.90 • —
Hydrocyanic acid, dilute, NF, 2%, 5-lb. bots lb. .40 • —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd. 100 lbs.19.25 • —
55-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs.20.75 • —
20-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 • —
20-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs.22.50 • —
tanks, works frt. equald. 100 lbs.15.50 • —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada; New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic acid, dms., works, 30% basis lb. .06 • —
Hydrofuramide dms., fib. ctns., works lb. .30 - .40
50-lb. cyls., l.c.l., works lb. .55 - .60
Hydrogen chloride, anhyd. 50-lb. cyls., l.c.l., works..lb. .45 • —
Hydrogen cyanide liq., 98% tanks, works..lb. .16 • —
Hydrogen fluoride, anhyd., cyls., dlvd. E..lb. .30½- .32½
cyls. dlvd. W. .....lb. .39 - —
tanks, works.....lb. .21 • —
Hydrogen peroxide, USP, bbls. dlvd. lb. .03¾- .05
35%, dms., c.l., dlvd. .....lb. .202 - —
dms., l.c.l., dlvd. .....lb. .211 - —
tanks, dlvd. .....lb. .1800- —
Hydroquinone photo grade, dms..lb. 1.03 - 1.06
Tech. dms., c.l., dlvd .....lb. .82½- —
dms., l.c.l., dlvd. .....lb. .84½- —
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago..lb. .11 • —
tanks, Belle, W. Va. .....lb. .073 • —
Hydroxycitronellal, cns. .....lb. 4.80 - 5.30
Hydroxyethyl cellulose, low viscosity grades, 20,000-lb. lots or more, f.o.b. shipping point lb. 1.00 • —
2,000 to 19,999-lb. lots, same basis lb. 1.05 • —
150 to 1,999-lb. lots, same basis. lb. 1.07 • —
Less than 150-lb. lots, same basis lb. 1.17 • —
Hydroxyethyl cellulose, high viscosity grades, 20,000-lb. lots or more, more, f.o.b. shipping point lb. 1.10 • —
2,000 to 19,999-lb. lots, same basis..lb. 1.15 • —
Hydroxyethyl cellulose, 85 to 1,999-lb. lots, same basis..lb. 1.17 • —
Less than 85-lb. lots, same basis. lb. 1.27 • —
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots.oz. 6.00 - 7.00
Hyoscyamine sulfate, bots. .....oz. 6.00 - 6.50
Hypernic extract, cryst. No. 1 bbls., l.c.l..lb. .52 • —
Liq. No. 1 bbls., l.c.l. .....lb. .35 • —
No. 2, bbls., l.c.l. .....lb. .27 • —
Hypophosphorous acid purif. 50% cbys., ton lots, f.o.b. works..lb. .85 • —
NF, 30%, cbys., all quantities, same basis..lb. .75 • —

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Ichthammol, NF, dms. .....lb. .75 - 1.05
Indigo (see Dyes coaltar, 1171 indigo, syn).
Indole, CP, bots .....lb.15.75 -18.25
Inositol bots., dlvd. .....lb. 5.00 - —
dms., dlvd. .....lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. .....lb. .95 • —
Resub., USP, dms .....lb. 2.00 - 2.02
Iodochlorohydroxyquinolin USP, dms..lb. 3.60 • —
Iodoform, NF, dms., kgs. .....lb. 4.90 - 5.00
a-Ionone, cns. .....lb. 3.80 - 4.15
b-Ionone, cns. .....lb. 4.40 - 4.90
Ipecac root, whole, bgs. .....lb. 8.75 - 9.25
Powd., bbls., bxs. .....lb. 9.50 -10.00
Irish moss, bleached, prime, bls..lb. .28 • .34
Iron blue, reg., bbls., c.l., dlvd. E.lb. .52 • —
bbls., l.c.l., ton lots, same basis. lb. .53 • —
bbls., smaller lots, same basis. lb. .54 • —
Iron blue, imp., British, bbls., c.l., dlvd., E..lb. .48 • —
bbls., l.c.l., ton lots, same basis. lb. .49 • —
bbls., smaller lots, same basis.lb. .50 • —
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 • —
bbls., l.c.l., ton lots, same basis. lb. .58 • —
bbls., smaller lots, same basis.lb. .59 • —
Iron blue dlvd. prices 1c. higher for Pacific Coast states:—Wash., Ore., Cal., N. M., Ariz., Mon., Wyo., Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous)
Iron oxide, black, pure, bgs., c.l., works..lb. .14¾- —
bgs., l.c.l., works.....lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works..lb. .14¼- —
bgs., l.c.l., works.....lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red, bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y lb. .14¼- —
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., l.c.l., works lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l., ex dock lb. .06 Nom.
bbls., l.c.l., ex whse. New York. lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¼- —
Peruvian type, bgs., l.c.l lb. .023 - .024
Iron oxide, yellow, pure, light lemon shade, bgs., c.l., works lb. .12¼- —
Other shades, same basis lb. .12 - —
Isoamyl alcohol, dms., c.l., works, frt. alld. E lb. .28 • —
dms., l.c.l., same basis.....lb. .29 • —
tanks, same basis.....lb. .25 • —
Isoborneol, cns. .....lb. 1.44 - 1.80
Isobornyl acetate, cns. .....lb. .48 • .56
Isobornyl formate, dms. .....lb. 1.20 • —
Isobornyl proprionate, dms. .....lb. 1.25 - 1.35
Isobutyl acetate, perfume grade, cns lb. .75 - 1.00
Solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l., same basis.....lb. .16¼- —
tanks, same basis.....lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd. lb. .16 • —
dms., l.c.l., dlvd. .....lb. .17 • —
tanks, dlvd. .....lb. .13½- —
Isobutyraldehyde, CP, dms., c.l., dlvd..lb. .27½- —
dms., l.c.l., dlvd. .....lb. .28½- —
Isobutyraldehyde, tech., dms., c.l., dlvd..lb. .21½- —
dms., l.c.l., dlvd. .....lb. .22½- —
tanks, dlvd. .....lb. .19½- —
Isoeugenol, cns. .....lb. 3.55 - 3.75
Isoniazid, powd., bulk, 25-kilo lots. or more..kilo.23.00 -25.50
bulk, smaller lots. .....kilo.24.00 -26.00
Isonicotinic acid, 100-lb. fib dms., works lb. 4.25 • —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd. E. .....lb. .24½- —
tanks, dlvd. E. .....lb. .21 • —
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .15½- —
Isopropanol (see Isopropyl alcohol).
Isophorone, dms., c.l., works....lb. .24½- —
dms., l.c.l., works.....lb. .25¼- —
tanks, works. .....lb. .22½- —
Isopropyl acetate, dms., c.l., dlvd. lb. .14 • —
dms., l.c.l., same basis.....lb. .15 • —
tanks, same basis.....lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .53 • —
dms., l.c.l., dlvd. .....gal. .60 • —
tanks, dlvd. .....gal. .37 • —
Refd., 95%, c.l., dms., dlvd..gal. .55 • —
dms., l.c.l., dlvd. .....gal. .62 • —
tanks, dlvd. .....gal. .39 • —
Refd., 99%, dms., c.l., dlvd. ...gal. .57 • —
dms., l.c.l., dlvd. .....gal. .64 • —
tanks, dlvd. .....gal. .41 • —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd..lb. .09½- —
dms., l.c.l., dlvd. .....lb. .10½- —
tanks, dlvd. .....lb. .07 • —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC), tech., dms., c.l., t.l., works..lb. 1.00 • —
dms., l.c.l., works.....lb. 1.05 - 1.25
tanks, works. .....lb. .99 • —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works..lb. .75 • —
450-lb. fib. dms., l.c.l., works....lb. .80 • .90
Isoquinoline, dms., works.....lb. .65 - 1.25
Itaconic acid, purif. fib. dms., c.l. works..lb. .54 • —
fib. dms. l.c.l., works.....lb. .55 • —
Tech. fib. dms., c.l., works....lb. .39 • —
fib. dms., l.c.l., works.....lb. .40 • —

J

J acid, paste, bbls., works, 100% basis..lb. 2.45 • —
Powd. bbls., same basis.....lb. 2.50 - 2.85
Jalap root, NF,*bls. .....lb. .85 • —
powd., bbls., bxs. .....lb. 1.00 • —
Japan wax, cs. .....lb. .30 • .31
Juniper berries, bgs. .....lb. .15 • —
Juniper berry oil, bots. .....lb. 2.90 - 3.75
Twice rectified bots. .....lb. 3.60 - 7.00
Juniper tar oil, NF, dms.....lb. .42 • .60
Juniper wood oil, tech. cns. .....lb. .38 • .55

K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms. .....lb. .10 • .12
colloidal, 50-lb. bgs. .....lb. .15¼- .17¼
Karaya gum No. 1, NF, powd. bbls..lb. .38 • .43
No. 2, powd., bbls. .....lb. .32 • .34
No. 3, powd., bbls. .....lb. .28 • .30
Koch acid, bbls., frt. alld., 100% basis..lb. 1.00 • —
Kola nuts, bgs. .....lb. .13 • —

L

L acid, bbls., works.....lb. 1.25 • —
Lacquer diluent, petroleum, 150°-240° F b.r., tanks, west coast, ex tax, Los Angeles..gal. .174 • —
tanks, east coast, N. J., N. Y. gal. .20 • —
Lacquer diluent, benzene type, tanks, group 3..gal. .1550- —
Toluene type, tanks, group 3..gal. .14375- —
tanks, Houston, Tex. .....gal. .16 • —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald..lb. .1780- .2740
bbls. dms. 20 cs or more, frt. equald..lb. .1830- .2700

ONE LABEL — *First Grade Only*
ONE PRICE — *That Saves You Money*
. . . and Perfect Performance for *Every* Purpose!

M. C. P.
Pure
Unadulterated
California
LEMON OIL
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An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one* label and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

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MUTUAL CITRUS PRODUCTS COMPANY
Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anahiem, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Lactic acid, edible, 50%, bbls., dms., 5 to 19 frt. equald. lb.	.1889-	.2840
bbls., dms., 1 to 4, frt. equald. lb.	.1938-	.2890
80%, c.l., bbls., dms., frt. equald. lb.	.3039-	.4625
bbls., dms., 20 or more, frt. equald. lb.	.3089-	.4675
bbls. dms. 5 to 19 frt. equald. lb.	.3139-	.4725
bbls. dms. 1 to 4 frt. equald. lb.	.3189-	.4775
Plastic grade, 50% c.l., bbls., works. lb.	.2740-	—
bbls., 20 or more, works. lb.	.2790-	—
bbls., 5 to 19, works. lb.	.2840-	—
bbls., 1 to 4, works. lb.	.2890-	—
80%, bbls., c.l., works. lb.	.4625-	—
bbls., 5 to 19, works. lb.	.4725-	—
bbls., 1 to 4, works. lb.	.4775-	—
Tech., 22%, bbls. c.l., works. 100 lbs.	6.80	—
bbls., l.c.l., works. 100 lbs.	7.20	—
44%, bbls., c.l., works. 100 lbs.	11.45	-12.70
bbls., l.c.l., works. 100 lbs.	11.85	-13.10
USP, 85%, cbys. lb.	.85	—
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald lb.	.14	—
bgs., 6,000-lb. lots, frt. equald lb.	.14½-	—
bgs., 2,000-lb. lots, frt. equald lb.	.14¾-	—
bgs., 200-lb. lots, frt. equald. lb.	.15¼-	—
Edible lactose in fib. dms., ½c. higher.		
Lactose, ferment. grade, bgs., c.l., works. lb.	.08½-	—
USP, fib. dms., 30,000-lb. lots, frt. equald. lb.	.21½-	—
fib. dms., 2,000-lb. lots, frt. equald. lb.	.22¼-	—
fib. dms., 200-1,800-lb. lots, frt. equald. lb.	.22¾-	—
USP lactose in bags ½c. to 1c. lower.		
Lactose, USP, spray dried, bgs., t.l., frt. equald. lb.	.18½-	—
bgs., l.t.l., frt. equald. lb.	.19 -	.19¾
Lady's slipper root, bls. lb.	3.50	- 3.75
Lake C red toner, alizarine, bbls., works. lb.	1.25	- —
Lamp black, bgs., c.l., works. lb.	.16	- .45
Lanolin, cosmetic, dms., works. lb.	.27	- .29
USP, anhyd., dms., works. lb.	.24	- .26
hydrous, dms., works. lb.	.23	- .25
Lard, cash, dms. lb.	.1325 Nom.	
Lard oil (see Grease oil).		
Larkspur seed, bgs. lb.	.35	- —
Laurel leaf oil, dms., cns. lb.	9.75	-12.50
Laurent's acid, bbls. lb.	.60	- —
Lauric acid, 90%, dms. lb.	.31	- .33½
tanks lb.	.28½-	—
Lauryl alcohol, bots. lb.	2.00	- 2.50
n-Lauryl methacrylate, dms., c.l., t.l. works. lb.	.65½-	—
dms., l.t.l., works lb.	.66	- —
Lavandin oil, 22-24%, dms. lb.	1.25	- 2.00
Abrial, dms. lb.	.95	- 1.50
Lavender flowers, medium, bls. lb.	.75	- .80
Ord., bls. lb.	.25	- .40
Select., bls. lb.	1.10	- —
Lavender flower oil, USP, French, 35-37% ester, cns. lb.	3.50	- 9.50
38-42% ester, cns. lb.	8.75	-13.00
Spike, Spanish, cns. lb.	2.20	- 2.85
Lead acetate, NF, cryst., gran., powd. lb.	.34½-	—
White, cryst., bbls. lb.	.25½-	—
gran., bbls. lb.	.26½-	—
powd., bbls. lb.	.26½-	—
Lead arsenate, acid powder, dealers, 5-lb. bgs. or larger, c.l., frt. alld. on 95 lbs. or more. lb.	.27½-	—
3-lb. bgs. or larger, l.c.l., frt. alld. lb.	.28½-	—
1-lb. bgs., c.l. lb.	.41½-	—
1-lb. bgs., l.c.l. lb.	.42½-	—
Lead, blue, basic sulfate, bbls., c.l., shipt. point, frt. alld. lb.	.17¼-	—
bbls., l.c.l. same basis. lb.	.18¼-	—
Lead carbonate (see Lead, white, basic carbonate).		
Lead chloride, dms. lb.	.32	- —
Lead iodide NF V jars. lb.	3.82	- —
Lead linoleate fused 26% Pb. dms. lb.	.38	- —
Lead metal, prime, pigs, New York. lb.	.11	- —
St. Louis lb.	.1085-	—
Lead monosilicate, bgs., c.l., works, frt. equald. lb.	.143	- —
bgs., l.c.l., same basis. lb.	.153	- —
Lead naphthenate, liq., 16% Pb, dms., dlvd. lb.	.19½-	—
24% Pb, dms., dlvd. lb.	.24¼-	—
Solid, 37% Pb, dms., dlvd. lb.	.31¼-	—
Lead nitrate, bbls. lb.	.26¾-	—
Lead orthosilicate-gel, 50-60% PbO_2, dms., works. lb.	.29¾-	.34¼
Lead peroxide, tech. powd., bbls lb.	.45	- .50
Lead phthalate dibasic dms., works. lb.	.41	- —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald lb.	.13¼-	—
bbls., l.c.l., same basis. lb.	.14¼-	—
97% Pb_3O_4, bbls., c.l., same basis. lb.	.1345-	—
bbls., l.c.l., same basis. lb.	.1445-	—
98% Pb_3O_4, bbls., c.l., same basis. lb.	.1345-	—
bbls., l.c.l., same basis. lb.	.1445-	—
lb.	.1360-	—
bbls., l.c.l., same basis. lb.	.1460-	—
Lead resinate, precip. 23% Pb, dms., ton lots, dlvd. lb.	.40¼-	—
Lead salicylate, normal, dms., works, lb.	.46	- —
Lead silicate (see Lead white basic silicate).		
Lead silico-chromate, bgs., c.l. lb.	.19	- —
bgs., l.c.l. lb.	.20	- —
Lead sulfate (see Lead blue basic sulfate).		
Lead tallate, liq., 16% Pb, dms. lb.	.15	- —
24% Pb, dms. lb.	.18¼-	—
Solid, 30% Pb, dms. lb.	.23¼-	—
Lead, white, basic carbonate, bgs., c.l., shipt. pt., frt. alld. lb.	.16½-	—
bgs., l.c.l., same basis. lb.	.17½-	—
Lead, white, basic silicate, bgs., c.l., shipt. pt., frt. alld. lb.	.15½-	—
bgs., l.c.l., same basis. lb.	.16½-	—
Lead, white, basic sulfate, bgs., c.l., shipt. pt., frt. alld. lb.	.16¼-	—
bgs., l.c.l., same basis. lb.	.17¼-	—
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb.	.14	- .15
non-ret. dms., l.c.l., same basis. lb.	.15	- .16
unbleached, non-ret. dms., c.l., same basis. lb.	.13	- .14
non-ret. dms., l.c.l., same basis. lb.	.14	- .15
Lemon bioflavonoid complex, fib. dms., 25-lb. lots, works lb.	9.00	- —
Lemon oil, USP, Calif., cns., dms. lb.	3.15	- 4.00
Messina, cns. lb.	4.50	- 9.50
Lemongrass oil, cns., dms. lb.	.90	- 1.50
dl-Leucine, dms., works. lb.	12.25	-15.00
Licorice root, gran., bls. lb.	.15	- .17
Powd., bls. lb.	.12	- .15
Whole, bls. lb.	.10	- .13
Lignaloe wood oil, Mexican, cns. lb.	2.75	- 3.50
Lignosulfonate, 70% tannin, bgs., c.l., works. lb.	.06½-	—
bgs., l.c.l., works. lb.	.06¾-	.07
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton.	14.25	- —
Chemical, hydrated, bgs., c.l., same basis. ton.	17.25	- —
Chemical, spray, bgs., c.l., same basis. ton.	16.25	- —

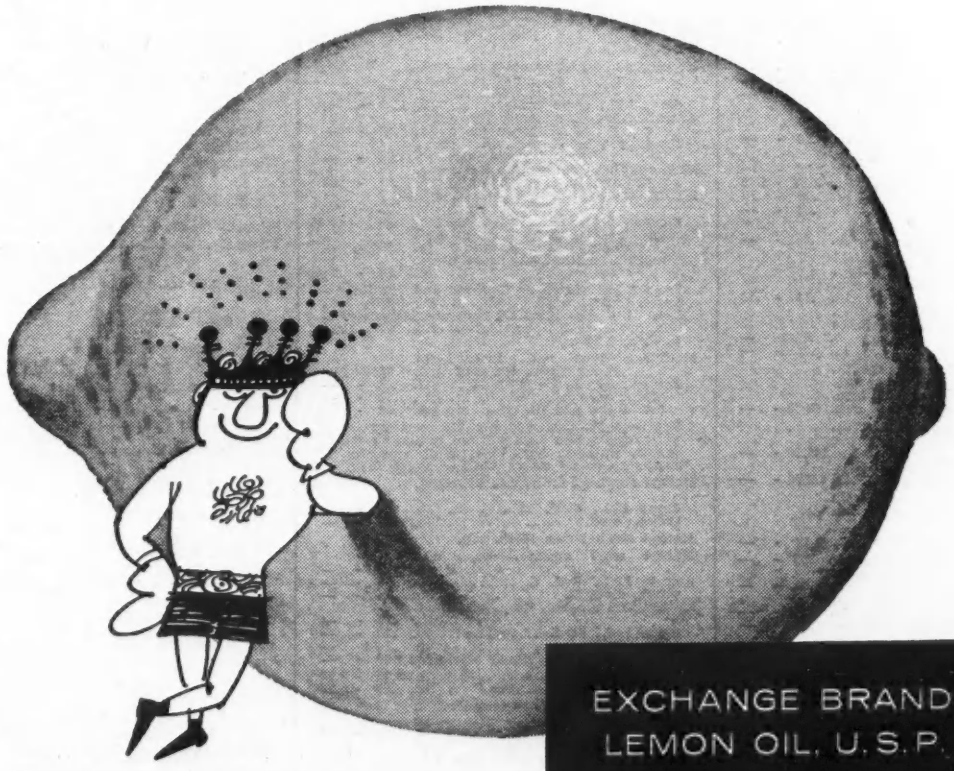
For New York delivery, add $0.29 freight charge.

Lime oil, dist., Mexican, cns. lb.	6.50	- 6.89
West Indian, cns. lb.	6.50	- 6.75
Expressed, West Indian, cns. lb.	6.50	-13.76
Lime salts (see Calcium).		
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).		
Linalool, ex bois de rose oil, dms. lb.	4.10	- 4.50
Syn., 98-100%, dms., works. lb.	4.40	- —
Linalyl acetate, ex bois de rose, 90-92%, dms. lb.	4.40	- 5.35
96-98%, dms. lb.	4.95	- 5.60
Ex petitgrain, bots. lb.	4.80	- 5.90
Syn., 98-100%, dms., works. lb.	4.40	- —
Lindane, 25%, formulation dealers, dms., frt. alld. lb.	1.65	- 1.82
Lindane, 99%, tech formulators, dms., frt. alld. lb.	2.65	- 3.25
Linden flowers, with leaves, bls. lb.	.25	- —
Without leaves, bls. lb.	.30	- —
Linseed meal expeller, 32% bulk, Minneapolis, mills ton.	56.00	-56.50
Extracted, 34% bulk, same basis. ton.	50.00	- —
Linseed oil, raw, dms., c.l., New York. lb.	.1670-	—
dms., l.c.l., New York lb.	.1770-	—
tanks, f.o.b. Minneapolis lb.	.1320-	—
tanks, New York lb.	.1470-	—
tankwagon, New York lb.	.1510-	.1530
Boiled linseed oil, .006c. per lb. higher.		
Linseed oil acids, dist., dms. lb.	.1970-	—
Water-white, dms. lb.	.2270-	—
Linseed pitch, dms. lb.	.06 -	.06¾
Litharge, coml. powd., bbls., c.l., works, frt. equald. lb.	.12¾-	—
bbls., l.c.l., same basis lb.	.13¾-	—
Lithium benzoate, dms. lb.	1.65	- 1.67
Lithium bromide, NF, gran., works, frt. equald. lb.	2.60	- —
Lithium carbonate, NF, dms., c.l., t.l., dlvd. lb.	1.29½-	—
dms., ton lots to t.l., dlvd. lb.	1.30	- 1.30½
Tech., dms., c.l., t.l., frt. alld. lb.	.67	- —
dms., ton lots, same basis. lb.	.73	- —
Lithium carbonate, tech., dms., smaller lots, same basis. lb.	.79	- —
Lithium chloride, CP, anhyd., dms., ton lots lb.	1.23½-	—
Tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld. lb.	.87	- —
dms., l.c.l., same basis lb.	.88	- .92
Lithium citrate, NF, dms., ton lots. lb.	1.50	- —
Lithium fluoride, dms., 20,000-lb. lots, dlvd. lb.	2.15	- —
bbls., ton lots and more, dlvd. lb.	2.18½-	—
bbls., less ton lots, dlvd. lb.	2.23½-	—
Lithium hydride, powd., dms., 500-lb. lots or more, works lb.	9.50	- —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld. lb.	.72	- —
dms., l.c.l., frt. alld. lb.	.73	- —
Lithium manganite, dms., works. lb.	.95	- 1.05
Lithium nitrate, tech., dms., 100-lb. lots lb.	1.15	- 1.25
Lithium salicylate, dms. lb.	1.60	- 1.70
Lithium silicate, dms., works lb.	1.10	- 1.20
Lithium stearate, dms., c.l., works. lb.	.47½-	—
dms., ton lots, works lb.	.48½-	—
dms., less-ton lots, works lb.	.53½-	—
Lithium sulfate, dms., 100-lb. lots. lb.	1.15	- 1.25
Lithium titanate, dms., works lb.	1.15	- 1.25
Lithol red toner, barium, bbls., works lb.	.98	- —
Lithol-rubine red toner, pure bbls., works lb.	1.50	- —
Resinated, bbls., works lb.	1.47	- —
Lithopone, ord., bgs., c.l., dlvd. E. lb.	.08⅜-	—
bgs., l.c.l., dlvd. E. lb.	.09½-	—
Lithopone, titanated (high-strength), bgs., c.l., dlvd. lb.	.11	- —
bgs., l.c.l., dlvd. lb.	.12	- —
Lobelia herb, bls. lb.	.45	- —
Lobeline sulfate, bots., works oz.	37.50	-38.50
Locust bean gum, powd., bgs. lb.	.38	- .39
Logwood extract, cryst., No. 1, bbls., l.c.l. lb.	.41	- —
No. 2, bbls., l.c.l. lb.	.39	- —
Liq. No. 1, bbls., l.c.l. lb.	.20	- —
No. 2, bbls., l.c.l. lb.	.19	- —
No. 3, bbls., l.c.l. lb.	.18½-	—
Solid, No. 1, boxes, c.l. lb.	.35	- —
Lycopodium, cs. lb.	9.00	- —
l-Lysine monohydrochloride, fib. dms., 25 lbs. or more lb.	8.00	- —

M

Mace, Siauw, No. 1 bls. lb.	2.45	- —
No. 2, whole, bls. lb.	2.10	- —
siftings, bls. lb.	2.05	- —
Mace oil, dist., cns., dms. lb.	12.75	-15.75
Magnesia, calcined, tech., bgs., ctns., frt. equald lb.	.25¾-	.26¼
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb.	.29¾-	.30¼
rubber grade, extra light, bgs., c.l., frt. equald lb.	.29¾-	—
bgs., l.c.l., frt. equald lb.	.30½-	—
USP, light bgs. lb.	.36½-	.37¼
heavy, fib. dms. lb.	.45	- .52
Magnesite, chemical grade, calcined, powd. bgs., c.l., works, frt. equald. ton.	82.50	- —

How does one lemon oil become the unchallenged champion?



It must start with the correct varieties of lemon (California Lisbons, Eurekas and Villa Francos) for prized bouquet and character.

It must all be cold pressed from the peel to capture the superb true lemon flavor.

It must be bulk-blended from the correct proportions of oils from coastal and desert grown lemons.

It must be delivered unaltered to the buyer.

All of these things the Sunkist Growers do with the benefit of the greatest source of fruit, ultra-modern equipment and years of skill...to make Exchange Brand Lemon Oil the world's best.

Now you have the convenience of two types blended to specific needs. Both come to you in containers sealed with tamper-proof tabs stamped "Exchange."

Sunkist Growers PRODUCTS DEPARTMENT
ONTARIO, CALIFORNIA

EXCHANGE BRAND
LEMON OIL, U.S.P.
Exchange
CALIFORNIA COLD PRESSED

Distributed in the U.S. and Canada by

DODGE & OLCOTT, INC.
180 Varick St., New York 14, N.Y.

FRITZSCHE BROTHERS, INC.
76 Ninth Ave., New York 11, N.Y.

UNGERER & COMPANY, INC.
161 Avenue of the Americas, New York 13, N.Y.

Inquiries from countries other than the U.S. and Canada should be directed to the Sunkist Growers, Products Department.

Magnesite, chemical grade, dead-burnt, standard grain bulk c.l., Chawelah, Wash. ton.46.00 - —
Magnesium bromide, cs., jars . . lb. .95 - 1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald . lb. .10½- —
bgs., t.l., frt. equald . . . . . lb. .11 - —
bgs., l.c.l., frt. equald . . . . . lb. .12½- .13½
Magnesium carbonate, USP, bgs., c.l., frt. equald . lb. .13 - —
bgs., t.l., frt. equald . . . . . lb. .13½- —
bgs., l.c.l., frt. equald . . . . . lb. .14½- .15½
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92% flake or pebble dms., c.l., works . lb. .12¾- —
dms., l.c.l., works . . . . . lb. .14 - .15
Magnesium chloride, hydrous, 99% flake, bgs., c.l., works.ton.55.00 - —
bgs., l.c.l., works . . . . . ton.65.00 -80.00
Magnesium gluconate, dms. . . . . lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b., works lb. .24½- .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld . lb. .21 - —
dms., l.c.l., frt. alld. . . . . lb. .22 - —
tanks, frt. alld. . . . . lb. .20 - —
Magnesium metal, 99.8% ingots, 10,000-lb. lots or more, works lb. .36 - —
Pigs, 10,000-lb. lots or more, works . lb. .35¼- —
Sticks, cs. works frt. alld. on carlots . lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium peroxide, 15%, dms., works . lb. 1.00 - 1.05
Magnesium phosphate tribasic, NF, bbls . lb. .75 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works . lb. .10½- .12
Magnesium sulfate, tech., bgs., c.l., works . 100 lbs. 2.15 - —
bgs., l.c.l., works. . . . . 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
bgs, l.c.l., 5,000 lbs., 1 withdrawal . 100 lbs. 3.10 - —
bgs, smaller lots . . . . . 100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots . lb. .38 - —
fib. dms., 1,000-lb. lots . . . . . lb. .40 - —
fib. dms., 100-lb. lots . . . . . lb. .45 - —
Bulky and super grades of magnesium trisicilate 7c. per. lb. higher.
Malachite green straight, PTMA, bbls, works . lb. 5.30 - —
Malathion, dms., c.l., works . . . . . lb. .89 - —
dms., l.c.l., works . . . . . lb. .92 - 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride dms., c.l., dlvd. E. of Rockies . lb. .28¾- —
dms., l.c.l., dlvd. E. of Rockies . lb. .29¾- —
tanks, dlvd. E. of Rockies . . . . lb. .27¾- —
Prices on maleic anhydride W. of Rockies, 1½c. per. lb. higher.
Malic acid, tech., dms. . . . . lb. .50 - —
Mandelic acid NF dms., 1,000-lb. lots. lb. 2.35 - —
dms., smaller lots . . . . . lb. 2.40 - 2.50
Mandrake root, bls. . . . . lb. .48 - .50
Manganese acetate, dms., dlvd. . . . lb. .35 - —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works lb. .11 - .16
Manganese chloride, CP anhyd., dms., 20,000-lb. lots, works lb. .21¾- —
Smaller lots, works . . . . . lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works . ton.148.00 - —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, paper bgs., same basis . . . . ton.144.50 - —
40,000 to 99,999-lb. lots, dms. same basis . ton.152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganous gluconate, dms . . . . . lb. 1.84 - —
Manganese hydrate, dms., dlvd . lb. .35 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms . lb. .35¾- —
Solid, precip., 8.2% Mn, bbls . lb. .41¼- —
Manganese metal, electrolytic, dms., c.l., dlvd. E. . . . . lb. .34 - —
dms., ton lots, dlvd. E. . . . . lb. .36 - —
dms., smaller lots, dlvd. E. . lb. .38 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld . lb. .29¾- —
Manganese rezinate, fused, 3½% Mn, dms . lb. .25¼- —
Precip., 6½-7% Mn, dms . . . . . lb. .33 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd. S. E. . ton.97.50 - —
bgs. l.c.l., dlvd. S. E. . . . . ton.104.50 - —
Manganese tallate, 6%, dms . . . . . lb. .24 - —
Mangrove bark, E. African, 38% tannin, bgs., c.l., ex dock . ton.67.00 -68.00
Mangrove bark, South American, 30% tannin, bgs., c.l., ex dock . ton.47.00 -50.00
Manila copal gum, C, bgs. . . . . lb. .35 - .39
DBB, bgs. . . . . lb. .25 - .28
DK, bgs. . . . . lb. No stocks.
DK, dust bgs. . . . . lb. .14 Nom.
MA, soft, bgs. . . . . lb. .20 - .24
WS, bgs. . . . . lb. No stocks.
Mannitol, com'l, fib. dms., ton lots, works . lb. .60 - —
fib. dms. to ton lots, works . lb. .62 - —
fib dms., single dm. works . lb. .65 - —
Marine pitch, dms. . . . . lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l, works . . . . . lb. .30 - —
bgs., l.c.l., works . . . . . lb. .31 - —
Menadione, USP, bots. . . . . gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf . lb. .07¼- —
Menthol, nat., USP, Brazilian, cs. lb. 5.00 - 5.25
Japanese, cs. . . . . lb. 7.00 - 7.18
Syn., USP, racemic, cns . . . . . lb. 4.50 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld . lb. .44 - —
bgs., fib. dms. less ton lots, same basis . lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld . lb. .54 - —
bgs., fib. dms., less ton lots, same basis . lb. .56 - —
Mercuric chloride NF, cryst., dms., 50-lb lots or more . lb. 4.98 - —
gran. or powd., dms., 100-lb. lots or more . lb. 4.78 - —
Mercuric cyanide, NF, VIII, powd., fib. dms . lb. 6.84 - —
Mercuric iodide red, NF, X, fib. dms., lb. 7.72 - —
Mercuric oxide, red, NF, X, powd., 50-lb. lots or more . lb. 5.97 - —
Tech., 100-lb. lots or more, works . lb. 5.77 - —
Mercuric oxide, yellow, NF, X, fib. dms . lb. 6.14 - —
tech., bbls., 1,000-lb. lots . . . lb. 5.58 - —
bbls., smaller lots . . . . . lb. 5.60 - —
Mercurous chloride (see Calomel).
Mercurous iodide, yellow, NF . lb. 7.72 - —
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 76 lbs. per flask, net flask.237.00 -240.00
Mesityl oxide, dms., c.l., dlvd. . lb. .15 - —
dms., l.c.l., dlvd. . . . . lb. .16 - —
tanks, dlvd. . . . . lb. .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works . . . . lb. .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m- Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, works . lb. .47 - —
dms., smaller lots, works . lb. .47½- .50
tanks, works . . . . . lb. .45 - —
Methanol, nat., denaturing grade, tanks, frt. alld . gal. .25 - —
Syn. zone 1, dms., c.l. or t.l. min., dlvd . gal. .47½- —
dms., l.c.l., dlvd. . . . . gal. .54½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .31 - —
tankwagon, 4,000 gal. min., dlvd gal. .26 - —
tankwagon, 4,000 gal. min., works gal. .25 - —
Zone 2, dms., c.l., or t.l., min. frt. alld. or dlvd. gal. .51½- —
dms., l.c.l., works . . . . . gal. .58½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd. Metropolitan area gal. .35 - —
tanks, 4,000 gal. min., dlvd, gal. .30 - —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah, Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methenamine (see Hexamethylenetetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt. alld . . . . . lb. 1.25 - —
dms., l.t.l., same basis . . . . . lb. 1.29 - —
dl-Methionine, fib. dms., frt. alld., 50-lb. or more . lb. 3.50 - —
Feed grade, 98%, fib. dms., same basis lb. 1.55 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs., frt. alld . lb. .61 - .64
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .21½- —
non-ret. dms., l.c.l., same basis.lb. .22 - .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd. zone 1 lb. .23½- —
non-ret. dms., l.c.l., same basis. lb. .24 - .24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio., Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld . gal. .62½- —
Syn., dms., c.l., frt. alld. E. . . gal. .66 - —
dms., l.c.l., frt. alld. E. . . . . gal. .72 - —
tanks, frt. alld. E. . . . . gal. .51 - —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., l.t.l., dlvd. . . . . lb. .40 - —
tanks, dlvd. . . . . lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E . lb. .17 - —
dms., l.c.l., dlvd, E. . . . . lb. .18 - —
tanks, dlvd. E. . . . . lb. .14½- —
Methylamyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd. . . . . lb. .18 - —
tanks, dlvd. . . . . lb. .14½- —
Methylamyl ketone, dms., works.lb. 1.05 - —
Methyl anthranilate, cns. . . . . lb. 2.25 - 2.75
Methyl benzoate, cns., dms. . . . . lb. .65 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld . lb. .62 - .65
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works . lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis . lb. .89 - —
50-lb. bgs., smaller lots, frt. alld. on 100 lbs . lb. 1.05 - —
Standard vis. (15,400 cps.), 50-lb. bgs., c.l., frt. alld . lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis . . . . . lb. .76 - —
50-lb. bgs., smaller lots, frt. alld. on 100-lbs . lb. .79 - .89
Methyl chloride, indust. cyls., frt. equald . lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Refrigerator mfrs., cyls., dlvd . lb. .43¾- —
other consumers or service men, cyls., dlvd . lb. .67¾- —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns. . . . . lb. 1.55 - 1.80
Methyl ethyl ketone, dms., c.l., dlvd . lb. .15 - —
dms., l.c.l., dlvd. . . . . lb. .16 - —
tanks, dlvd. . . . . lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works . lb. .45 - —
dms., l.c.l., works . . . . . lb. .45¾- —
tanks, works . . . . . lb. .43 - —
Methyl formate, refd., dms. . . . lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works . lb. .21 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works lb. .21¼- —
100-lb. multiwall paper bgs., l.t.l., works . . . . . lb. .23 - —
Methyl heptin carbonate, bots . lb.28.00 -31.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 4.05 - —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd . lb. .17 - —
dms., l.c.l., dlvd. . . . . lb. .18 - —
tanks, dlvd. . . . . lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va. . lb. .31 - —
dms., smaller lots, same basis . lb. .31½- —
tanks, same basis . . . . . lb. .29 - —
Methyl naphthyl ketone, cryst., cns . lb. 3.00 - 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Methyl parathion tech., 80%, dms., frt. alld. E . lb. 1.12 - —
Methyl parathion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF., 5-lb. fib. dms. . lb. 6.90 - —
Methyl salicate, USP, cns., 500-lb. lots . lb. .62½- .67½
Methyl testosterone, USP, 100-gram bots gram. No Prices.
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies lb. 2.80 - —
Methyl violet toner, tungstated, PTMA, bbls., same basis. . lb. 4.35 - —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted . . . . . lb. 3.25 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l. works . lb. .14 - —
dms., l.c.l., l.t.l., works . . . lb. .16¾- —
tanks, 4,000-gal. min., tank trucks, maximum load limit, works lb. .12½- —
tanktrucks, 1,000-gal. min., works lb. .13½- —
b-Methylnaphthalene, 32° C., m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs. c.l., works . lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
Mica, wet-grd., biotite, bgs., c.l., works, frt. alld. E . lb. .06½- —
bgs., l.c.l. ex-whse. . . . . lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E. lb. .08¼- —
bgs., l.c.l., ex-whse, or freight alld. E . lb. .09 - —
rubber, bgs., c.l., works, frt. alld. E . lb. .08 - —
bgs., l.c.l., ex-whse. or frt. alld. E . lb. .08¾- —
wallpaper, bgs., c.l., works, frt. alld. E . lb. .08¾- —
bgs. ex-whse. or frt. alld. E. lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E . lb. .08¼- —
l.c.l., ex-whse., or frt. alld. E. lb. .09 - —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works . lb. .11 - .12
Mineral black, bgs., works . . . . lb. .0160- .0673
Mineral oil, white tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .62 - —
non-ret. dms., l.c.l., same basis . gal. .67 - —
tankcars, refy. . . . . gal. .46 - —
65-75 vis., non-ret. dms., c.l., same basis . gal. .62 - —
tankcars, refy. . . . . gal. .46 - —
80-90 vis., non-ret. dms., c.l., same basis gal. .63 - —
non-ret. dms., l.c.l., same basis . gal. .68 - —
tankcars, refy. . . . . gal. .47 - —
135-138 vis., non-ret. dms., c.l., same basis . gal. .69 - —
non-ret. dms., l.c.l., same basis . gal. .74 - —
tankcars, refy. . . . . gal. .53 - —
145-155 vis., non-ret. dms., c.l., same basis . gal. .75 - —
non-ret. dms., l.c.l., same basis . gal. .80 - —
tankcars, refy. . . . . gal. .59 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis . . . . . gal. .77 - —
non-ret. dms., l.c.l., same basis . gal. .82 - —
tankcars, refy. . . . . gal. .61 - —
200-210 vis., non-ret. dms., c.l., f.o.b., New York . gal. .84 - —
non-ret. dms., l.c.l., same basis . gal. .89 - —
tankcars, refy. . . . . gal. .63 - —
300-350 vis., non-ret. dms., c.l., f.o.b. New York . gal. .84½- —
non-ret. dms., l.c.l., same basis . gal. .89½- —
tankcars, refy. . . . . gal. .68½- —
Mineral orange, American, bbls., c.l., works . lb. .1560- —
bbls., l.c.l., same basis . . . . . lb. .1660- —
Mineral spirits, petroleum, odorless, tanks, refy. Watson, Calif. gal. .25 - —
tanks, Borger, Tex. . . . . gal. .25 - —
Houston, Tex. . . . . gal. .25 - —
Philadelphia . . . . . gal. .32 - —
Newark . . . . . gal. .29 - —
New York, dlvd. . . . . gal. .30½- —
Wood River, Ill. . . . . gal. .2725- —
tankwagon, New Jersey, dlvd. gal. .37½- —
tankwagon, New York, dlvd. gal. .38½- —
Mineral spirits, petroleum, regular, tanks, Calif., ex tax San Francisco . gal. .169 - —
tanks, east coast, New Jersey,, New York . gal. .18 - —
tanks, group 3 . . . . . gal. .12875- —
tanks, Houston, Tex. . . . gal. .145 - —
tankwagon, Boston . . . . . gal. .20 - —
Buffalo . . . . . gal. .20½- —
Chicago . . . . . gal. .289 - —
Cleveland . . . . . gal. .23½- —
Newark . . . . . gal. .19 - —
New York . . . . . gal. .19 - —
Philadelphia . . . . . gal. .19½- —
Pittsburgh . . . . . gal. .19 - —
Providence . . . . . gal. .20½- —
Mirbane oil (see Nitrobenzene)
MNPT maroon toner, kgs., c.l., works . lb. 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans . gal. .14 - .14½
tanks, New York . . . . . gal. .16 - —
Molybdated orange, bbls. . . . . lb. .48 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works . kilo. 7.84 - —
325 mesh, ctns., works . . . . . kilo. 9.13 - —
Molybdenum trioxide, pure, dms., works . lb. 1.15 - —
Tech., dms., works, basis Mo, content . lb. 1.39 - —
Molybdic acid, 85% dms., works.lb. 1.20 - —
Monoallylamine, dms., c.l., dlvd . lb. .965 - —
dms., c.l., dlvd. . . . . lb. .995 - —
tanks, dlvd. . . . . lb. .96 - —
Monobutylamine, dms., c.l., dlvd. E. of Rockies . lb. .57½- —
dms., l.c.l., same basis . . . . . lb. .58½- —
tanks, same basis . . . . . lb. .55 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E . lb. .10½- —
dms., l.c.l., same basis . . . . . lb. .11½- —
tanks, same basis . . . . . lb. .08¾- —
Monoethanolamine, dms., c.l., dlvd. E . lb. .27½- —
dms., l.c.l., same basis . . . . . lb. .28½- —
tanks, same basis . . . . . lb. .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis . lb. .38½- —
dms., l.c.l., dlvd. E., 100% basis. lb. .40 - —
tanks, dlvd. E., 100% basis . lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd E . lb. .27½- —
dms., l.c.l., same basis . . . . . lb. .28½- —
tanks, same basis . . . . . lb. .25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd . lb. .33½- —
dms., l.c.l., same basis . . . . . lb. .34½- —
tanks, same basis . . . . . lb. .31 - —
Monomethylamine, anhyd., cyls., l.c.l., frt. equald., 100% basis . lb. .30 - —
tanks, same basis . . . . . lb. .26 - —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .36 - —
dms., l.c.l., frt. equald., 100% basis . lb. .36½- —
tanks, frt. equald., 100% basis. lb. .26 - —
40% soln., dms., frt. equald., 100% basis lb. .33 - —
dms., l.c.l., frt. equald., 100% basis . lb. .33½- —
tanks, frt. equald., 100% basis. lb. .26 - —
Monopentaerythritol, tech., bgs., c.l., dlvd. E . lb. .30 - —
bgs., l.c.l., dlvd. E. . . . . lb. .31 - —
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld . lb. 3.05 - —
dms, 100-lb. lots, same basis . . lb. 3.25 - —
Monosodium glutamate, dms., any quantity, dlvd . lb. 1.07 - —
Monosodium phosphate (see sodium phosphate, monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-butyl-m-cresol).
Montan wax, dom., refd., bgs. . . . lb. .29 - .30
Imp., crude, Bohemian, bgs. . . lb. .22 - .24
German, bgs. . . . . lb. .26 - .27
Morphine, cns. . . . . oz.12.40 -12.60
Morphine acetate, anhyd., cns . . . oz. 9.95 -10.00
Morphine hydrobromide, cns . . . oz. 9.90 - 9.95
Morphine hydrochloride, NF, cns oz. 9.90 - 9.95
Morphine sulfate, USP, cns. . . . . oz. 9.90 -10.05
Morpholine, dms., c.l., dlvd. E . lb. .55¼- —
dms., l.c.l., dlvd. E, ... lb. .56¼- —
tanks, dlvd. E. . . . . lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb. lots . lb. 4.45 - 5.15
cns., 25-lb. lots . . . . . lb. 5.05 - 5.65
Ketone, fib. dms., 100-lb. lots lb. 4.70 - 5.30
cns., 25-lb. lots . . . . . lb. 5.35 - —
Xylol, fib. dms., 100-lb. lots . lb. 1.40 - —
cns., 25-lb. lots . . . . . lb. 1.45 - —
Mustard seed, Danish, yellow, bags. lb. .10¾- —
Montana, yellow, bgs. . . . . lb. .10½- —
Montana, No. 1, Oriental, bgs . lb. .08½- —
Mustard oil, syn. bots. . . . . lb. 1.60 - 1.85
Mustard seed oil, nat., dms. . . . lb. 9.50 - 9.85
Myristic acid, dms . . . . . lb. .24 - .26¼
tanks . . . . . lb. .23¾- —
Myrobalans, Bombay . . . . . ton.44.00 -45.00
J-1, genuine, bgs., ex dock . ton.50.00 -51.00
J-1, crushed, bgs., ex dock . ton.65.00 -66.00
Myrobalans, extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty . lb. .10½- .10¾
Myrrh gum, cs. . . . . lb. .50 - .55

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's, 140°F, flash, tanks, east coast, New Jersey and New York . gal. .18 - —
tanks, group 3 . . . . . gal. .15 - .15¼
tanks, Houston, Tex. . . . . gal. .19 - —
tankwagon, Newark . . . . . gal. .19 - —
New York . . . . . gal. .19 - —
Philadelphia . . . . . gal. .19½- —
Naphtha, VM&P, petroleum, 225°-300°F., b.r., tanks, west coast, Los Angeles . . . . gal. .174 - —
Portland, Ore. . . . . gal. .18 - —
San Francisco . . . . . gal. .179 - —
Seattle, Wash. . . . . gal. .18 - —
east coast, New Jersey and New York . gal. .19 - —
group 3 . . . . . gal. .13875 —
Naphtha, VM&P, petroleum, tankwagon, Boston . gal. .21½- —
Chicago . . . . . gal. .299 - —
Cleveland . . . . . gal. .24½- —
Houston, Tex. . . . . gal. .15½- —
Newark . . . . . gal. .20½- —
New York . . . . . gal. .20½- —
Philadelphia . . . . . gal. .21½- —
Pittsburgh . . . . . gal. .20 - —
Naphthalene, crude, dom., 74°, tanks, frt. equald . lb. .06¼- —
78°, bgs., c.l., same basis . lb. .07½- .08
bgs., l.c.l., same basis . . . lb. .07¾- .08¼
tanks, same basis . . . . . lb. .07 - —
Imp., 78°, bgs., large lots . . lb. .04 - —
Refd., indust., chipped, crushed, bgs., frt. equald . lb. .12½- —
tanks, same basis . . . . . lb. .11¾- —
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis . lb. .15½- —
cs., 50 lbs., c.l., same basis. lb. .15¾- —
1-lb. pkgs., c.l., same basis. lb. .18½- —
a-Naphthol, bbls., frt. alld . . . lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works . lb. .33 - —
bbls., l.c.l., works . . . . . lb. .35 - —
Naphthol, ITR, red toner, bbls., works . lb. 5.50 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).

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—Goodman and Gilman, THE PHARMACOLOGICAL BASIS OF THERAPEUTICS, Second Edition (Page 970). Published by The Macmillan Company (1955).
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Mercuric Oxide Yellow NF, *used in antiseptic eye preparations.*

Mercurous Chloride Mild NF, *used as a cathartic and local antiseptic.*

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1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6 8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, bbls. frt. alld lb. .50 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib. dms lb. 8.50 - —
Neatsfoot oil, 15° cold test, dms lb. .30 - .33
20° cold test, dms lb. .29 - .32
30° cold test, dms lb. .28 - .31
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .35 - —
fib. dms., 100-999-gram lots, basis activity gram. .40 - —
Neroli oil, NF, French, bots. lb.550.00 -575.00
Tunisian, bots. lb.400.00 - —
Nerolin, cns. lb. 2.55 - 2.85
Nevile and Winther's acid, dms., frt. alld lb. 1.30 - —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd lb. .68½- .75½
Nickel carbonate, bbls., dlvd lb. .78¼- .85¼
Nickel chloride, bbls., dlvd lb. .37 - .45
Nickel formate, bbls., ton lots, frt. alld lb. .72 - .73
Nickel metal electro cathodes, cs., works lb. .74 - —
Nickel nitrate, bbls., works lb. .32½- .33½
Nickel oxide, black, bbls lb. .85 - —
Green, bbls. lb. .84 - —
Nickel sulfate, bgs., c.l., dlvd lb. .28 - —
bgs., l.c.l., dlvd lb. .28½- .36
Nicotinamide, USP, dms., frt. adjusted kilo. 9.50 - 9.80
Nicotinamide hydrochloride, dms., frt. adjusted kilo. 9.50 - 9.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld lb. 1.20 - —
40%, manufacturers, 500-lb. dms., frt. alld lb. 1.05 - —
Nicotinic acid, USP, dms., dlvd kilo. 8.00 - 8.30
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs lb. .10¼- —
Nikethamide, cbys. lb. 5.00 - —
Nitric acid, 36° Be., cbys., c.l., works E. 100 lbs. 5.75 - —
cbys., l.c.l., works E 100 lbs. 6.05 - 6.85
38° Be., cbys., c.l., works, E. 100 lbs. 6.25 - —
cbys., l.c.l., works E. 100 lbs. 6.55 - 7.35
Nitric acid, 40° Be., cbys., c.l., works, E. 100 lbs. 6.75 - —
cbys., l.c.l., works, E. 100 lbs. 7.05 - 7.85
42° Be., cbys., c.l., works, E. 100 lbs. 7.25 - —
cbys., l.c.l., works, E 100 lbs. 7.55 - 8.35
Nitric acid, 58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
84½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumer, cbys. extra, c.l., works lb. .18½- —
cbys. extra, l.c.l., works lb. .20 - —
5-pint bots., extra, cs., c.l., same basis lb. .22½- —
5-pint bots., extra, cs., l.c.l., same basis lb. .24 - .25
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 - —
Paste, dms., frt. alld., 100% basis. lb. 1.10 - —
o-Nitroaniline, flaked, dms., t.l., frt. alld lb. .49 - —
dms., l.t.l., frt. alld lb. .51 - —
o-Nitroaniline orange toner, kegs, lb. 1.35 - —
p-Nitroaniline, dms., frt. alld lb. .445 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .13 - —
dms., l.c.l., frt. alld lb. .14 - —
tanks, frt. alld lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .66 - —
dms., l.c.l., works lb. .67 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .37½- —
bbls., l.c.l., same basis lb. .38½- .40½
Nitrocellulose, ester-soluble, 18-20 cps., bbls., c.l., same basis lb. .39½- —
bbls., l.c.l., same basis lb. .40½- .42½
Ester-soluble, 250-400, 600-1,000 seconds, bbls., l.c.l., same basis. lb. .43 - .46
Spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis. lb. .43 - —
bbls., l.c.l., same basis lb. .44 - .46
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .42 - —
bbls., l.c.l., same basis lb. .43 - .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms., c.l., frt. alld lb. .15 - —
dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
Nitroethane, dms., c.l., dlvd. E lb. .24 - —
dms., l.c.l., dlvd. E lb. .24¾- —
tanks, dlvd. E lb. .22½- —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald unit. 1.10 - —
Nitrogenous process tankage, bulk, works unit-ton. 3.50 - 4.00
Nitrogenous sewage sludge, b u l k, f.o.b. Chicago, works unit-ton. 2.60 - —
Nitromethane, dms., c.l., dlvd E lb. .24 - —
dms., l.c.l., dlvd. E lb. .24¾- —
tanks, dlvd. E lb. .22½- —
Nitromethane prices West of Rockies are 1c. higher.
a-Nitronaphthalene, bbls., frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .54 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .51 - —
dms., l.c.l., frt. alld lb. .53 - —
1-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .22½- —
dms., l.c.l., same basis lb. .23¼- —
tanks, same basis lb. .21 - —
2-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .18½- —
dms., l.c.l., same basis lb. .19½- —
tanks, same basis lb. .16 - —
Nitropropane prices West of Rockies are 1c. per lb. higher.
o-Nitrotoluene, dms., c.l., frt. alld. lb. .13 - —
dms., l.c.l., frt. alld lb. .14 - —
tanks, frt. alld lb. .11 - —
p-Nitrotoluene, tech., flake or solid, dms., l.c.l., works lb. .30 - —
m-Nitro-p-toluidine, dms. lb. 1.43 - —
Nonylphenol, dms., c.l., frt. alld. lb. .22 - —
dms., l.c.l., frt. alld lb. .23 - —
tanks, frt. alld lb. .19½- —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutgalls, Aleppo, bgs. lb. .35 - .38
Chinese, bgs. lb. No prices.
Nutmegs, East Indian, bgs lb. 2.20 - —
West Indian, bgs lb. 1.90 - —
Nutmeg oil, USP, dist., East Indian, cns lb.11.65 -15.75
West Indian, cns. lb.11.65 -15.75
Nux vomica, bls lb. .12 - —
Powd., bbls., bxs lb. .18 - —

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms lb. .45 - .93
Octane, indust., tanks, Bayonne, N.J. gal. .20 - —
Borger Tex. gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .37 - —
dms., l.c.l., dlvd, Zone 1 lb. .39 - —
tanks, dlvd., Zone 1 lb. .34½- —
Octyl alcohol, perfumers' grade, bots lb. 1.60 - 3.25
Octyl alcohol, tech. (see 1-Octanol, tech).
Octyl phenol, bgs., c.l., works lb. .24 - —
bgs., l.c.l., works lb. .24½- —
tanks, works lb. .23 - —
Octyl phenol in dms., 11c. higher.

Oils

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms lb. .18 - .18⅛
tanks lb. .16½- —
Oleic acid, dbl.-dist. (white), dms. lb. .17¾- .20¼
tanks lb. .15¼- —
Single-dist., dms. lb. .16½- .19
tanks lb. .14 - —
Oleo oil, extra, dms. lb. .17¾- .18
Oleostearine, dms. lb. .13½- .14
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .20 Nom.
Tears, cs. lb. .22 - .30
Olibanum oil, bots. lb. 5.00 - 7.65
Extra fine, bots lb. 8.00 - 9.50
Olive oil, edible, dms., spot, duty-paid gal. 2.50 - 2.60
Olivine, crude, works ton.12.00 - —
20 mesh, works ton.15.00 - —
100 mesh, works ton.20.00 - —
Opium, USP, cns oz.19.20 -19.45
gran., cns. oz.21.65 -21.90
powd., cns. oz.21.65 -21.90
Orange oil, expressed, USP, Brazilian, cns., dms lb. No stocks.
California, cns., dms lb. 2.25 - 2.35
Florida, csn., dms lb. 1.70 - 2.30
Messina, cns. lb. 3.85 - 5.85
West Indian, cns., dms lb. 2.50 - 3.85
Sweet, dist., cns., dms lb. .90 - —
Orange peel, bitter, Haitian, bls. lb. .14 - .16
Sweet lb. .30 - .35

Orange Pigments

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns lb. 1.80 - 2.30
Orris root, Florentine, bls. lb. .55 - —
powd., bbls., bxs. lb. .68 - —
Verona, bls. lb. .35 - .40
powd., bbls., bxs. lb. .44 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid, (see o-Chlorobenzoic acid).

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Heiko-Neroli

This perfect artificial substitute for the natural oil will not discolor.

Heiko-Pink

This is one of our oldest products, recommended for all carnation compositions. Its distinctive strength gives it unusual retentive power.

Convallol

Its lily-of-the-valley odor gives compositions an extraordinarily natural and long-lasting perfume.

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Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitraniline (see o-Nitroaniline)
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol)
Orthonitrophenol (see o-Nitrophenol)
Orthonitrotoluene (see o-Nitrotoluene)
Orthophenetidine (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol)
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base)
Orthotoluidine (see o-Toluidine)

Osage orange, cryst. No 1. bbls. l.c.l.	lb	40	—
Extract, liq., No 1. bbls., l.c.l.,	lb	19	—
Ouabain, USP, bots	gram	3.00	4.00
Ouricury wax, crude, bgs	lb	79	Nom.
Refd., pure, bgs	lb.	.90	Nom.
Oxalic acid, bbls. c.l., works	lb	18½	—
bbls., 10,000-lb lots, works	lb.	18¾	—
bbls., smaller lots, works	lb	19¾	—
b Oxynaphthoic acid, fib dms., 250 lbs or more frt alld	lb	1.14	1.17
Oxyquinolin sulfate cns 100-lb lots, works	lb	4.75	5.00
cns, smaller lots works	lb	4.92	5.17

P

Palm oil, clarif., dms	lb.	.14	- .15
tanks	lb.	.11½	—
Palm oil acid, dist., dms.	lb.	.15¾	.19¼
tanks	lb	13¾	14¼
Palmarosa oil, cns	lb.	3.50	- 6.00
Papain, purified	lb.	8.50	-12.00
Papaverine hydrochloride, nat. or syn. USP cns., 25-oz to 100-oz lots	oz	5.00	—
cns., smaller lots	oz	5.05	5.20
Papaverine sulfate nat. or syn., USP cns	oz	7.10	7.35
Paprika, Bulgarian, bgs	lb.	.28	- —
Hungarian, bgs.	lb.	.33	- —
Spanish bgs	lb.	.37	.47
Yugoslavian, bgs.	lb.	.34½	—

Para-aminobenzoic acid (see p-Aminobenzoic acid)
Para-aminosalicylic acid (see p-Aminosalicylic acid)
Parachlorobenzoic acid (see p-Chlorobenzoic acid)
Paramethylphenylcinchonic acid (see Neocinchophen)
Paranitrobenzoic acid (see p-Nitrobenzoic acid)
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid)
Para-aminophenol (see p-Aminophenol)
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline)
Para-anisidin (see p-Anisidine)
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde)
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).

Para toner, red, bbls.	lb.	1.21	—
Chlorinated, kgs.	lb.	1.35	- —
Paraffin, crude, scale white, 123°-127°F ASTM, tanks, refy.	lb.	.0710-	—
fully refd., 122°-124°F, ASTM, tanks, refy	lb.	.0815-	—
125°-127° F. ASTM, tanks, refy.	lb.	.0815-	—
130°-132°F. ASTM tanks, refy.	lb.	.0815-	—
132°-134° F., ASTM, tanks, refy.	lb.	.0815-	—
135°-137°F. ASTM, tanks, refy.	lb	.0815-	—

AMP temperatures are an arbitrary 3°F higher than ASTM.

Paraffin oil, pale, 100-110 vis. at 100°F., tanks east coast refy	gal.	.14	- —

Paraffin wax (see Paraffin)

Paraformaldehyde 91% flake, bgs., c.l., frt. alld	lb.	.0955-	—
bgs., l.c.l., frt. alld	lb.	.1155-	.1255
91%, powd., bgs c.l., ex whse	lb.	.167	—
bgs. l.c.l., ex whse	lb.	.182	- —
USP X, fib dms., c.l.,	lb.	.19	- —
fib. dms., 1,000-lb. lots	lb.	.20	- —
fib. dms., smaller lots	lb.	.21½	—
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd	lb.	.14	- —
55-gal dms., l.c.l., dlvd.	lb.	.15	- —
tanks, dlvd.	lb.	.11½	—

Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol see p-Phenylphenol)
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).

Parathion, ethyl, dms. c.l., frt. alld.	lb.	1.38	- —
dms., l.c.l., frt alld.	lb.	1.41	- —

Parathion prices 2c. per lb. higher in West

Paratoluenesulfonamide (see p-Toluenesulfonamide).

Paris green dealers, 100 lb. dms., frt. alld	lb.	.45	- —
Passion flower herb bls.	lb.	No stocks.	
Patchouli oil, dms.	lb.	4.30	- 5.75

Peach kernel oil, USP (see Apricot kernel oil).

Peacock blue, fugitive, 100% color strength, 250-lb., bbls., dlvd. E. of Rockies	lb.	1.00	- —

Peacock blue price 1c. higher W. of Rockies.

Peanut meal, 45%, old process, bgs., mills	ton.	60.00	-62.00
Peanut oil, crude, tanks, f.o.b. mills.	lb.	.15¾	—
Refd., dms.	lb.	.21¼	- .21½
tanks	lb.	.19¼	—
Pectin, dom., NF, citrus, powd., bbls.	lb	2.05	2.08
tech, powd., 150 jelly grade.	lb.	1.23	- —
Imp., Danish, ex whse	lb.	1.28	- —
Penicillin potassium, cryst., bulk, 1,000,000 units.		.0675-	.0700
Penicillin, procaine, bulk 1,000,000 units.		.0675	-.0700
Penicillin, sodium, bulk 1,000,000 units.		.0775-	.0800
Pennyroyal oil, USP, imported, cns.	lb.	2.30	- 3.10
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald	lb.	.22	- —
bgs., l.c.l., same basis	lb.	.23½	- .30

Pentachlorophenol in dms. 1c. higher.

Pentaerythritol, tech., bgs., c.l., dlvd.	lb.	.29½	- —
bgs., l.c.l., dlvd.	lb.	.30½	- —

Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol)

Pentane, indust., tanks, Tex. refy.	gal.	.14	- —
Pentobarbital, dms., 100 lbs or more	lb.	6.00	- —
Pepper, Malabar black, spot, bgs.	lb.	.26½	—
Lampong, black, bgs	lb.	.26½	—
Sarawak, black, bgs	lb.	.26¾	—
Red, Funtuas, spot, bgs.	lb.	.33	- —
Gondars, bgs.	lb.	.30	- —
Japanese, hontaka, bgs.	lb.	.30	- —
Santaka, bgs.	lb.	.27	- —
Sudanese, bgs.	lb.	.34	- —
Zanzibar, bgs.	lb.	.43	- —
White, Muntok, bgs	lb.	.36	- —
Peppermint leaves, dom., USP, bls., dms	lb	70	75
imp USP bls	lb	85	—
Peppermint oil, nat., dms	lb.	4.25	- 6.25
Redist., USP, dms.	lb.	4.60	5.95
Perchloroethylene dms. c.l. or t.l., dlvd	lb.	.13½	—
dms., l.c.l. dlvd	lb.	.15¼	—
tanks, dlvd.	lb.	.11¾	—
tanktruck 1,000 gal. min. dlvd.	lb.	.12¼	—
Peri acid dry bbls. frt. alld	lb	1.25	—
Paste, bbls frt alld	lb	1.30	- —
Peru balsam, dms.	lb.	1.30	- 1.95

Persic oil, USP (see Apricot kernel oil).

Petitgrain oil South American, cns., dms	lb.	2.33	- 2.95
Petrolatum, cream dms., c.l., refy.	lb.	.07¾	—
dms., l.c.l., dlvd	lb.	.10½	—
tanks, refy	lb.	.05½	—
Extra amber dms. c.l., refy	lb.	.06¾	—
dms., l.c.l., dlvd	lb.	.09½	—
tanks, refy	lb.	.04½	—
Lily white, dms., c.l., refy	lb.	.08½	—
dms., l.c.l., dlvd	lb.	.10½	—
tanks, refy	lb.	.05¼	—
USP, snow white, dms., c.l., refy.	lb.	.08¾	—
dms., l.c.l., dlvd	lb.	.11	- —
tanks, refy	lb.	.06¼	—
Petrolatum, USP, soft yellow, dms., c.l., refy	lb.	.06¾	—
dms., l.c.l., dlvd	lb.	.09½	—
tanks, refy	lb.	.04½	—

Petroleum pitch (see Asphalt, petroleum).

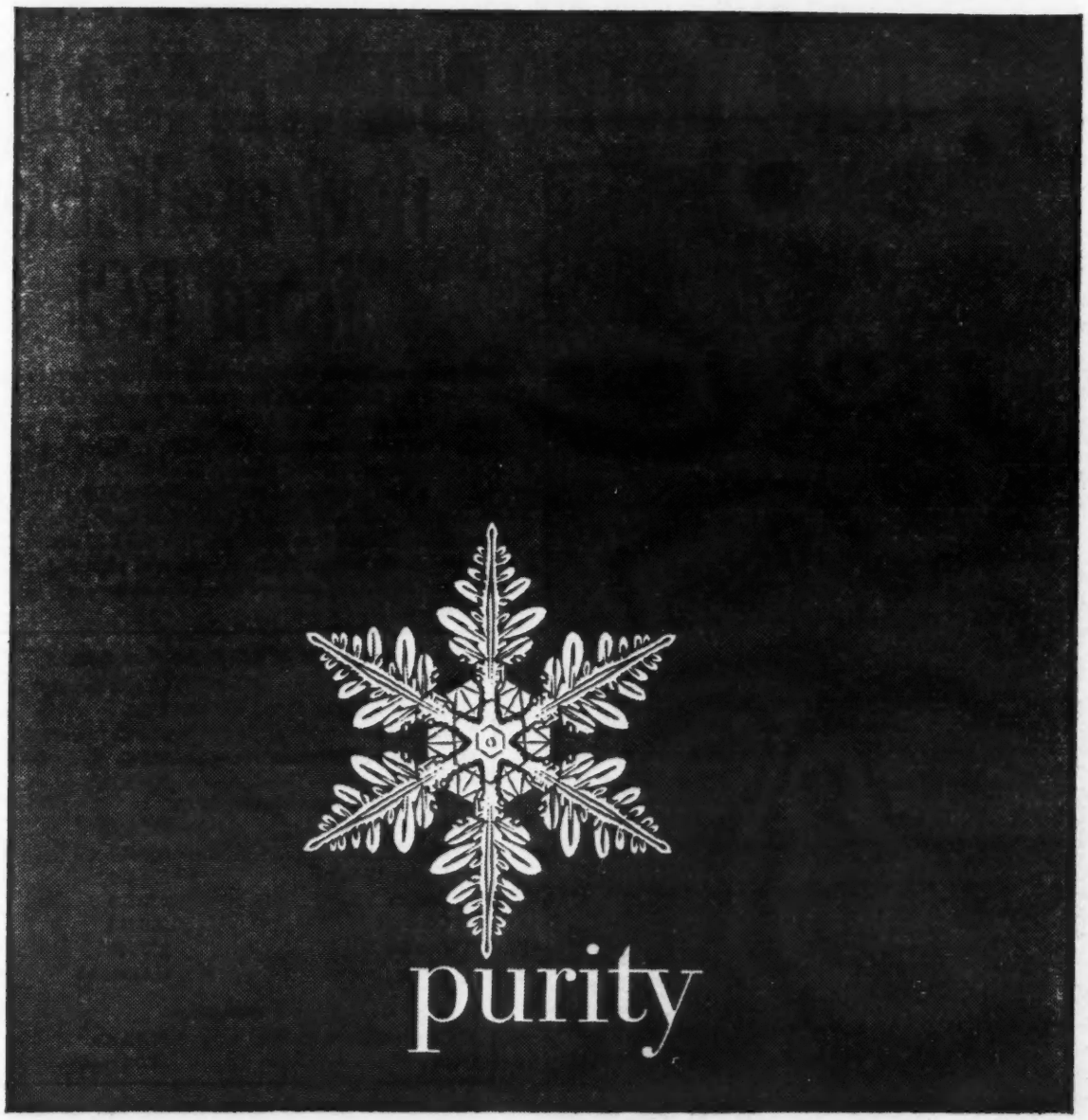
Petroleum Products

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works	lb.	.16½	.18½
non-ret. dms., l.c.l., works	lb.	.17½	.19
tanks, works	lb.	.14½	.17
50-55%, sulfonic content, non-ret. dms., c.l., works	lb.	.16	- —
non-ret. dms., l.c.l., works	lb.	.17	- —
tanks, works	lb.	.13	- —
o-Phenetidine, dms. c.l. frt. alld. E	lb.	.91	- —
dms., l.c.l., same basis	lb.	.93	- —
p-Phenetidine, dms., c.l., frt. alld.	lb.	1.05	—
dms., same basis	lb.	1.08	- —
Phenobarbitol, USP, dms., 100-lb lots	lb	3.25	- —

Phenobarbital-Sodium (See sodium phenobarbital).

Phenol, 90-92% (cresol 8-10%), non-ret dms., frt. alld. E of Rockies	lb.	.18	- —
non-ret. dms. t.c.l. same basis.	lb.	.19	- —
tanks, same basis	lb.	.16	- —
82-84% (cresol 16-18%), non-ret, dms., c.l., same basis	lb.	.17½	—
non-ret. dms. t.c.l. same basis.	lb.	.18½	—
tanks, same basis	lb.	.15½	—
39°C. or above, tar distilled non-ret. dms., c.l., same basis	lb.	.19½	—
non-ret dms., t.c.l., same basis.	lb.	.20½	—
tanks, same basis	lb.	.17½	—
Phenol, USP, syn., dms., c.l., t.l., frt. alld.	lb.	.20½	—
dms., same basis	lb.	.21¼	—
tanks, same basis	lb.	.18¼	—
Phenolphthalein, USP or yellow, fib. dms., 2,000-lb. lots	lb.	1.30	- 1.33
fib. dms. smaller lots	lb.	1.32	- 1.37
Phenothiazine drench fib. dms., t.l., dlvd	lb.	.44	- —
fib. dms., l.t.l., same basis	lb.	.47	- —
NF, fib. dms., t.l., same basis	lb.	.43	- —
fib. dms., l.t.l., same basis	lb.	.46	- —



OF PENOLA SOLVENTS IS UNSURPASSED

Penola solvents are laboratory-tested for absolute purity. This is your guarantee of efficient, economical processing.

QUALITY — Penola modern research techniques and facilities assure you of the highest quality solvents.

TECHNICAL ASSISTANCE — The Penola staff of experts will be glad to advise on your processing problems or supply any technical data you require. Just call or write your nearest Penola office.

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Penola

Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol)
Phenylacetaldehyde, soln., 50%, bots lb. 2.95 - —
100% bots lb 4.00 - 4.65
Phenylacetic acid pure, cryst., cns. lb. 1.25 - 1.75
dl-Phenylalanine, dms., works lb. 27.00 - 37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib dms, 200-lb lots dlvd E lb 3.45 - —
fib dms., smaller lots, dlvd E lb 3.60 - —
N-Phenyldiethanolamine dms., c.l., dlvd E lb .41 - —
ums., t.c.l., dlvd E lb. .42 - —
tanks, dlvd E lb. .38½ - —
m-Phenylenediamine dms. frt alld. lb. 1.10 - —
o-Phenylenediamine coml., 100 to 1,000 lbs., fib dms., works lb 1.70 - 1.80
p-Phenylenediamine, refd., dms., works lb. 1.42 - —
Tech., dms., works lb. 1.40 - —
Phenylethanolamine, dms., c.l., works lb. 75½ - —
dms t.c.l. same basis lb. 76¼ - —
Phenylethyl acetate bots. lb. 1.30 - 1.60
b-Phenylethylamine, dms., 1,000-lb. lb. lots, works lb 1.10 - —
dms, smaller lots works lb 1.15 - 1.40
2-Phenylethyl alcohol, extra, dms lb. 1.14 - 1.50
Standard dms lb 1.10 - 1.90
Phenylglyconic acid (see Mandelic acid).

Phenylhydrazine, 97%, 450-lb. dms. lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E lb 1.80 - —
fib dms. smaller lots. dlvd E lb 2.10 - —
Phenylethylphenyl acetate, bots lb. 4.00 - 4.25
o-Phenylphenol, dms., t.c.l. works. lb. .48 - .50
p-Phenylphenol, bgs. c.l. works lb. .38½ - —
bgs., t.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¾ - .26
nubs, bgs. lb. .33¼ - .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .22¾ - .25
Phloroglucinol, coml., fib. dms., works lb 6.40 - —
CP, bots., works lb. 17.75 - —
Tech., fib. dms., works lb. 10.45 - —
Phloxin red toner (see Eosin red toner)
Phosgene, ret. cyls., works lb. .15½ - —
Phosphate defluorinated (see under D)
Phosphate rock, Curacao, Atlantic ports, New Orleans ton. 48.00 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried unground, 66-68% b.p.l., bulk, c.l., mines, long-ton. 5.11 - —
68-70%, b.p.l., bulk, c.l., same basis long-ton. 5.51 - —
70-72% b.p.l. bulk, c.l. same basis long-ton. 6.16 - —

Phosphate rock, Florida, land pebble, run-of-mine, washed, dried unground, 74-75%, b.p.l., c.l., bulk long-ton. 7.16 - —
76-77% b.p.l., c.l., bulk, same basis long-ton. 8.16 - —
Above Florida prices are based on fuel oil at $2.57 per bbl. and labor at $1.47.
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., l.c.l., same basis, 100 lbs. 7.25 - 7.75
tanks, t.w., works 100 lbs. 5.60 - —
80%, cbys., c.l., frt. equald, cbys., l.c.l., works 100 lbs. 8.10 - 9.35
tanks, t.w., works 100 lbs. 6.00 —
NF, 85%, cbys., c.l., works 100 lbs. 8.50 - —
cbys., l.c.l., works 100 lbs. 8.75 9.00
tanks, t.w., works 100 lbs 6.65 —
Phosphorus, amorph, red, dms., t.l., works lb. 55 - —
dms., smaller lots, works lb. .56 - .57
white (yellow) solid dms., c.l., works frt. equald lb. .20 .20½
dms. t.c.l., works, frt. equald lb. 21½ - —
tanks, works, frt equald lb 19 - —
Phosphorus oxychloride dms., c.l., works lb 14 - —
dms., t.c.l., works lb 15 - —
tanks, works lb 12½ - —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½ - —
dms., t.c.l., works lb. .14½ - .15½
solid, dms., c.l., works lb. .11½ - —
dms., t.c.l., works lb. .12½ - .13½
Phosphorus pentoxide, dms., c.l., works lb. 1395 - .1450
dms. t.c.l. works lb. 1550 - .1650
Phosphorus sesquisulfide, dms., cs., c.l. works lb. .38 - —
dms., t.c.l., works lb. .39 - .40

Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works lb. .15 - —
tanks, works lb. .12½ - —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .21 - —
bgs., t.c.l., same basis lb. .22 - —
tanks, same basis lb. .20½ - —
Phthalimide, 97-98%, dms., frt. allowd lb. .65 - —
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies lb. 3.45 - —
Resinated bbls. same basis lb 3.00 - —
Water dispersable, bbls., same basis lb. 1.69 - —
Phthalocyanine blue prices 1c. higher W. of Rockies.
Phthalocyanine green toner, bbls., works lb 3.95 - —
Resinated bbls. lb 3.50 - —
Water dispersable bbls. lb 1.71 - —
Phthalocyanine green prices 1c. higher W of Rockies.
Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more lb. 5.00 - —
NF, fib. dms. lb. 5.20 - —
a-Picoline dms. c.l. works, frt. equald lb 43 .43½
dms. t.c.l. works, frt. equald lb 44 —
tanks same basis lb 415 422
a,g-Picoline 5°C dms. c.l. works. lb 32½ - —
dms. t.c.l. works lb 33 - —
g-Picoline, tanks, f.o.b., works lb. 1.50 - —
t.l., dms., same basis lb. 1.60 - —
Picric acid NF bbls lb 85 —
Tech bbls lb 44 —
Pigment green B, kgs. lb 1.45 —
Pilocarpine hydrochloride, USP bots oz. 4.75 5.25
Pilocarpine nitrate USP bots. vials. oz 4.65 4.75
Pimento, Jamaican, bgs lb .65 —
Mexican, bgs. lb. .33 - —
Pimento berry oil NF dms lb 3.75 9.25
Pimento leaf oil, cns. lb. 1.90 - 2.60
Pine oil dest.-dist. dms. t.c.l. works lb. .15 —
dms. t.c.l. ex whse New York. lb. .173 —
Steam-dist. dms. ex whse New York lb. .185 - —
dms., dlvd. lb. .189 - —
Pineneedle oil Siberian (see Abies Siberica oil)
Pinetar oil coml. dms. c.l. works. lb. .0561 —
dms. t.c.l. works lb .0634 —
dms. c.l. ex whse. New York. lb. .0745 —
tanks works lb. .046 —
Rectified NF, dms., included, t.c.l., works, South lb. .40 - —
dms. incl. t.c.l., ex whse., New York lb. .41½ - —
Refd., dms., incl., t.c.l., works lb. .35 - —
dms incl. t.c.l. ex whse. New York lb. .36½ - —
Pink root bls lb 2.50 —
Piperazine, dry, dms. t.l., frt. alld. lb. 1.95 - —
dms. t.c.l., same basis lb. 2.00 - —
Piperazine citrate, 36%, dms., t.l., frt. allwd lb. 1.07 - —
dms., t.t.l., same basis lb. 1.09 - —
Piperazine hexahydrated, 44%, dms., frt. allwd lb. .88 - —
dms., t.t.l., same basis lb. .90 - —
Piperidine, dist., 98% min., dms., frt. equald lb. 2.70 —
Piperonyl butoxide dms. dlvd 5 lb 4.50 5.05

Pitches

Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum)
Platinum metal, works oz. 55.00 - 60.00
Pleurisy root bls lb 45 50
Podophyllum resin NF dms lb 15.60 16.10
Poke root bls lb .19 .22
Polymyxin bulk bots., 50 billion units or more 1,000,000 units. .52 - —
bulk bots. 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25-billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate dms. 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms 20,000 lb lots works. lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum chips bgs lb .26 —
Nubs bgs lb .37 .40
Poppy seed, Argentine bgs lb No stocks.
Dutch, bgs. lb. .23 - —
Danish, bgs. lb. No stocks.
Polish, bgs. lb. .33 —
Turkish, bgs. lb. No stocks.
Potash, caustic liq., 45% basis, dms., c.l. works 100 lbs 4.25 - —
dms. t.c.l. same basis 100 lbs 5.05 - —
tanks same basis 100 lbs 3.70 - —
Flake, 88-92% dms., c.l. same basis 100 lbs. 9.15 - —
dms., t.c.l. same basis 100 lbs. 10.20 - —
Solid, 88-92%, dms. c.l. works. 100 lbs. 8.70 - —
dms. t.c.l., works 100 lbs 9.75 - —
Potassium acetate, NF dms lbs .33 .36
Potassium bicarbonate USP gran., dms lb .22 - —
USP powd., dms lb. .24 - —
Potassium bichromate gran., bgs., c.l., t.l., works lb .18 - —
bgs., t.c.l., works lb. .18½ - .19¼
Potassium bichromate in dms ½c. higher.
Potassium bitartrate dom., NF, gran. or powd., dms. c.l. lb. .40 - —
dms. 5,000 lbs., 1 shipt lb. .40½ - —
dms., smaller lots lb. .41 .43
Imp., NF, gran. or powd., kgs. lb. .33½ - .37
Potassium bromate, dms 1,000-lb. lots or more, works lb. .50 —
dms., smaller lots, works lb. .52 .63
Potassium bromide, USP gran., bbls. kgs lb .39 .40
Potassium carbonate, dom., NF, gran., bbls. dms lb. .20 - —
Potassium carbonate, dom., tech., powd., bbls., dms lb. .21 - .23
calcined, bgs., c.l., works, 100 lbs. 8.50 - —
bgs., t.c.l., same basis 100 lbs. 9.55 - —
Potassium carbonate, hydrated, 83-85%, bgs., c.l., works, 100 lbs. 7.10 - —
bgs., t.c.l., works 100 lbs. 8.15 - —
Potassium chlorate cryst. dms. c.l., works lb. .12¼ - —
dms. t.c.l. works lb. .13½ - .14¼
Powd., dms., c.l., works lb. .12¾ - —
dms. t.c.l., works lb. .14 - .15
wurks lb. .12¼ - —

note: ORTHO-PHENYLPHENOL now available from RCI

● If you manufacture disinfectants for household, farm or industrial uses, you are familiar with the valuable properties of ortho-phenylphenol as a germicide and fungicide. It combines high efficiency against micro-organisms with low toxicity to higher forms of life. It has excellent stability and a very mild odor.

After a long program of research, development, pilot plant and product evaluation, Reichhold now offers ortho-phenylphenol for immediate shipment from inventory. This new RCI product is manufactured in the company's Tuscaloosa, Ala. plant and has already been enthusiastically accepted by selected customers to whom it has been offered.

Properties of RCI Ortho-phenylphenol

Appearance	white or grey to pink flakes
Molecular Weight	170.2
Freezing Point	57.2°C.
Boiling Point @ 760 m.m.	286°C.
Flash Point	255°F.
Solubilities (gm/100 gm solvent @ 25°C)	
Methyl Alcohol	950-1000
Ethyl Alcohol	550-600
Isopropyl Alcohol	550-600
Acetone	650-700
Olive Oil	50-100
Pine Oil	250-300
Water	less than 0.1

Specifications

Ortho-phenylphenol content	98.0% min.
Inerts	2.0% max.

Outside the field of micro-organism control, ortho-phenylphenol is now coming into its own as a dyeing assistant for synthetic fibers. Its chemical reactivity also offers interesting possibilities for its use as an intermediate. Write today for additional information.

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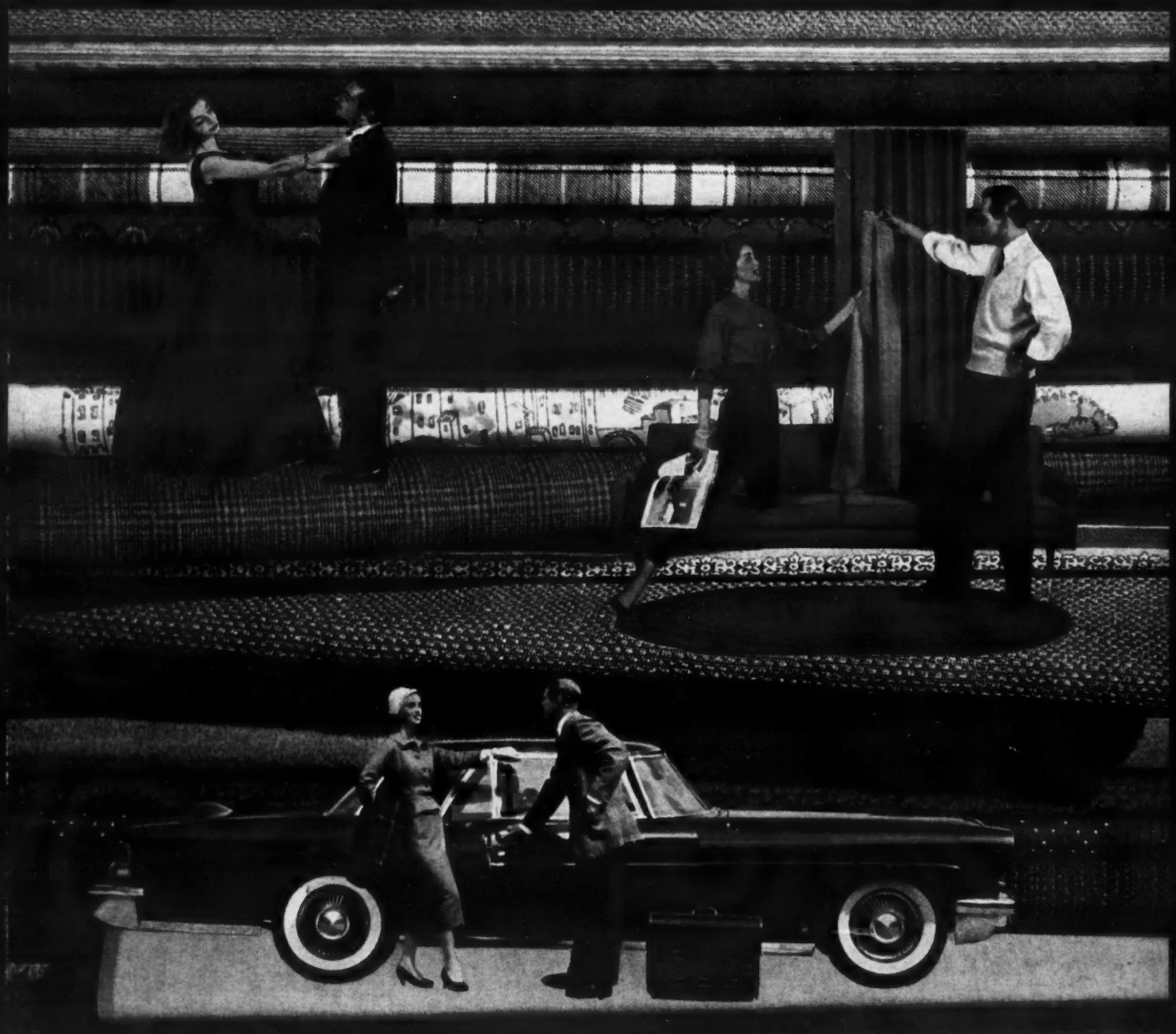
Synthetic Resins • Chemical Colors • Industrial Adhesives • Phenol
Formaldehyde • Glycerine • Phthalic Anhydride • Maleic Anhydride • Sebacic Acid
Sodium Sulfite • Pentaerythritol • Pentachlorophenol • Sulfuric Acid
REICHHOLD CHEMICALS, INC., RCI BUILDING, WHITE PLAINS, N. Y.



Evening gown designed by Helena Barbieri for Modern Couture

SUDDENLY IT'S RAYON EVERYWHERE YOU LOOK

With artistry of rare degree, textile manufacturers use today's wonderful rayon fibers to create products as lustrous as the moon or practical as sixpence: ever-better ball gowns and tires, carpeting and drive-belts, drapes and raincoats.

Last year these inventive applications were reflected in rayon production measuring well over the combined total for all other man-made fibers. Name the characteristics you want; rayon producers engineer them. New processes, like solution-dyeing of yarns, give fabrics that are richer but more serviceable . . . easily washable yet color fast . . . with more dimensional stability . . . and greater uniform durability.

Only chemicals and other materials having exceptional purity can be used to produce rayon. Our Columbia-Southern caustic soda performs three different, vital steps in converting wood chips and cotton linters into mill-ready rayon. Many of the painstaking techniques involved in the manufacture of this special "rayon grade" caustic carry over into production of Columbia-Southern's regular forms of this tremendously versatile alkali.

A leading merchant producer of chlorine, Columbia-Southern has long ranked as a pacesetter in alkalies and related chemicals that help make better products faster, more safely, with greater savings.

Columbia-Southern Chemical Corporation, One Gateway Center, Pittsburgh 22, Pennsylvania. Offices in principal cities. In Canada: Standard Chemical Limited.

COLUMBIA-SOUTHERN CHEMICAL CORPORATION

A Subsidiary of Pittsburgh Plate Glass Company

Caustic soda and white reinforcing pigments, basic Columbia-Southern chemicals, are used throughout many industries. World's

COLUMBIA-SOUTHERN CHEMICALS HELP BRIGHTEN

IDEAS ON PARADE . . . reviewed every day by the management team building and selling successful products. Their responsibilities range from research and design to marketing and delivery.

These men and women make the profit-creating decisions for going, growing businesses . . . rubber goods, glass, textiles, petroleum products, metals, plastics, paper, food, chemicals, soap, foils and wraps, cosmetics, pharmaceuticals, disinfectants and cleansers. A vital part of their jobs is spotting and applying new trends in materials selection, processing, and handling that produce better goods at lower cost.

The versatile basic chemicals brighten the prospect for continual improvement of almost all products and processes. Columbia-Southern, a leading producer of these essential industrial chemicals, can be a big help to your business as both supplier and technical adviser. Call Columbia-Southern with your next order. You'll soon see why Columbia-Southern chemicals, research, service, and technical assistance help brighten the future for products. The Columbia-Southern Chemical Corporation, One Gateway Center, Pittsburgh 22, Pennsylvania. Offices in principal cities. In Canada: Standard Chemical Limited.

$NaHCO_3$—Sodium Bicarbonate • $CaCl_2$—Calcium Chloride • Na_2SO_4—Sodium Sulfate
KOH—Caustic Potash • CCl_4—Carbon Tetrachloride • NH_3—Anhydrous Ammonia

World's first practicable all-colored tires, above, were developed by Columbia-Southern. You'll be seeing more—many more.

THE FUTURE FOR SO MANY PRODUCTS

LOOK AT Cl_2—CHLORINE

Highly reactive chlorine's transforming touch creates thousands of molecular regroupings necessary to economical processing of products ranging from solvents to plastics, wonder drugs to refrigerants.

LOOK AT NaOH—CAUSTIC SODA

Petroleum producers and cellophane manufacturers, textile and rubber makers, businesses by the dozens put caustic soda's voracious appetite to work "eating" away unwanted organic or inorganic compounds.

LOOK AT Na_2CO_3—SODA ASH

This versatile alkali serves as basic raw material or essential "refiner" in the manufacture of glass, chemicals, detergents, ferrous and non-ferrous metals, pigments, soap, textiles, paper and many other items.

LOOK AT H_2O_2—HYDROGEN PEROXIDE

One of Columbia-Southern's newer products, this compliant chemical has a range of reactions that permits its use for bleaching paper and textiles, as a rocket propellant, as a reagent in organic syntheses.

COLUMBIA-SOUTHERN CHEMICAL CORPORATION A Subsidiary of Pittsburgh Plate Glass Company

HCl—Muriatic Acid • $TiCl_4$—Titanium Tetrachloride • $Ca(OCl)_2$—Calcium Hypochlorite
Chlorinated Solvents • Chlorinated Benzenes • Agricultural Chemicals • Chrome Chemicals

CHLORINE LEADS LIVES BACK FROM THE SHADE

Into the darkness of mental disturbance, light. Take chlorpromazine. Thousands of disturbed men and women do, to tremendously beneficial effect. This relaxant makes it possible to free many of the severely disturbed from security restraint and permits more rewarding communication between patient and therapist. First of the newer tranquilizers to be synthesized or chemically "reproduced," chlorpromazine utilizes chlorine in three important, entirely separate ways.

From the deadliness and pain of disease, release. Chloromycetin, one of the more recent antibiotics to be successfully synthesized, saves thousands from the dread grip of such killers and cripplers as pneumonia, influenzal meningitis, undulant fever, and many staphylococcus, streptococcus, or virus-caused diseases. Chlorine brings this medication into being, too.

In these and other drugs, chlorine is a vital, functioning part of the molecular structure. In many others, this wonder element acts primarily as an "intermediate," establishing the favorable conditions necessary for further chemical processing. In yet other cases, chlorine converts compounds' physical properties alone, safely changing medicines into forms better suited for administration, handling, or storage.

Its readiness to react with other chemicals is so vital to industry that chlorine is one of the few elements whose shipping tonnages serve as a reliable index of total business activity. Bleach, germicide, active ingredient or intermediate in plastics, synthetic rubber, solvents, dyes, herbicides, refrigerants . . . chlorine's transforming touch leaves imprints everywhere.

Columbia-Southern, one of the leading merchant producers of chlorine, also supplies industry with caustic soda, soda ash, caustic potash, related alkalies, hydrogen peroxide, chlorinated solvents and benzenes, reinforcing pigments, titanium tetrachloride, chromium chemicals, ammonia, sodium bicarbonate, and other chemicals for smoother and more economical production of materials and goods enjoyed throughout the world.

Columbia-Southern Chemical Corporation, One Gateway Center, Pittsburgh 22, Pennsylvania. Offices in principal cities. In Canada: Standard Chemical Limited.

COLUMBIA-SOUTHERN CHEMICAL CORPORATION

A Subsidiary of Pittsburgh Plate Glass Company

Potassium chlorate, NF, cryst., works, dms., 2,000 lbs. or more, works..lb. .16¾- —
Gran., 25-lb. metal dms.....lb. .36 - —
Powd., dms., 2,000 lbs. or more, works lb. .17¼- —

Potassium chloride, agricultural (see Potassium muriate)
Indust., 99.9% KCL, bulk, c.l., works ton.29.00 - —
bgs., c.l., works ..... ton 33.50 - —
99.3% KCL, bulk, c.l., works.ton.27.00 - —
bgs., c.l., works .....ton.31.50 - —
USP, cryst., dms. ..... lb. .20 - .22
gran., dms. ..... lb. .21 - .23
powd., dms ..... lb. .24 - .26

Potassium chromate, tech., bgs lb. .50 - .50½
Potassium citrate, USP gran., dms. lb. .43 - —
Powd., dms. ..... lb. .40½- .41½

Potassium cyanide, dms. 20,000-lb. lots or more, works lb. .42½- —
dms., 2,000-19,999-lb lots, works.lb. .43 - —
dms., smaller lots, works ..... lb. .44 - .44½

Potassium dichromate (see Potassium bichromate)

Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works lb. .65 - —

Potassium ferrocyanide, dms., ton lots lb. .24½- —
dms., smaller lots ..... lb. .29 - —

Potassium fluoborate, fib dms., c.l., works lb. .30 - —
fib dms., t.c.l. works lb. .31 - —
Potassium fluoride, dms., works lb .37 - .38
Potassium gluconate, dms. .... lb. 1.67 - —
Potassium guaiacolsulfonate, NF, dms lb. 2.10 - 2.30

Potassium hydroxide, tech. (see Potash, caustic).

Potassium hydroxide, USP, pellets, 100-lb dms. 1 to 100-dm. lots lb. .33½- .38

Potassium hypophosphite, NF, fib. dms., 1,000-lb lots lb 1.38 - —
Potassium iodide, USP, cryst., or gran. lb. 1.40 - —

Potassium manure salt, 22% K_2O, bulk, c.l., works unit-ton. .17 - .1765

Potassium metabisulfite, gran., dms. lb. .16 - —
Powd., dms. ..... lb. .27 - —

Potassium muriate, standard, bulk, c.l., works unit-ton. .31 - .33
bagged, 60% minimum K_2O, same basis ton.23.50 -24.70
Granular, bulk, c.l., works unit-ton. .31½- .33½
bagged, 60% minimum K_2O, same basis ton.23.80 -25.00
Inside prices apply to material contracted for prior to July 1, 1958.
Outside prices apply to material contracted for after that date but also for delivery during the current month.

Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs.16.50 - —
bbls., smaller lots 100 lbs.17.50 -18.00
Potassium nitrate, NF, gran., bgs., 20-ton lots..100 lbs. 9.25 - —
bgs., smaller lots ..100 lbs.10.50 -11.00
NF, powd., bgs., 20-ton lots 100 lbs.10.25 - —
bgs., smaller lots 100 lbs.11.50 - 12.00

Potassium oxalate, neutral, tech., fine gran., bbls., dms lb. .32 - .34

Potassium pentaborate, gran., dms., c.l., works ton.219.50 - —
dms., ton lots, ex whse....ton.311.00 - —
dms., smaller lots, ex whse. ton.316.00 - —
Powdered potassium pentaborate $10 per ton higher.

Potassium perchlorate, dms., c.l., works lb. .18½- —
dms., t.c.l., works ..... lb. .19 - .20

Potassium permanganate, coml. kgs., works lb. .26 - .29
USP, dms., works..... lb. .29¼- .31

Potassium persulfate, dms., c.l., works lb. .17½- —
dms., t.c.l., works lb. .18 - .21

Potassium pyrophosphate, tetrabasic, dms., works lb. .15½- .18½

Potassium prussiate red (see Potassium ferrocyanide).

Potassium prussiate yellow (see Potassium ferro-cyanide).

Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., t.c.l., 5 dm. lots or more, works..100 lbs. 7.25 - 7.65
tanks, works .....100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works. 100 lbs. 5.95 - —
dms., t.c.l., 5 dm. lots or more, works..100 lbs. 6.70 - —
tanks, works .....100 lbs. 5.60 - —

Potassium silicate, glass grade, bgs., c.l., works..100 lbs.17.30 -18.15
bgs., t.c.l. works 100 lbs.17.80 - —
Soln., 29° Be, 1:2.5, dms., c.l., works..100 lbs. 4.95 - —
dms., t.c.l. 5 dms. or more works..100 lbs. 5.70 - —
tanks, works .....100 lbs. 4.60 - —

Potassium silicofluoride, bgs., works lb. .09½- .10
Potassium silicofluoride in drums, 0.4c per lb. higher.

Potassium stannate, dms., frt alld. E. lb. .750 - .823

Potassium sulfate, agricultural, bulk, c.l., works..unit-ton. .59½- .61½
Inside price applies to tonnage contracted for prior to July 1, 1958.
Outside price applies to tonnage contrated for after that date but also for delivery during the current month.

Potassium sulfate, NF VII, cryst., dms lb. .31 - .33
Gran., dms. ..... lb. .18½- —
Powd., dms. ..... lb. .16 - .17

Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate)

Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works ..... lb. .77 - .79

Potassium titanate, ctns., c.l., works. lb. .16¼- —
ctns., 5-ton lots, works..... lb. .16½- —
ctns., 1-ton lot or less, works lb. .16¾- —

Potassium-magnesium sulfate, basis 40%K_2SO_4 and 18% MgO, bulk, works, base price.ton.13.45 - —
bulk, works, July forward ton.14.00 - —

Potassium-sodium tartrate, NF gran. or powd. dms., c.l. lb. .42½- —
dms., 5,000-lb. lots ..... lb. .43 - —
dms., smaller lots ... lb. .43½- .49

Potassium-titanium fluoride, fib. dms., works lb. .39 - .40

Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 - —
fib. dms., t.c.l., works lb. .52½- .55

Potato starch (see Starch, potato)

Pregnenolone, bots. ..... gram. No prices
Pregnenolone acetate, bots....gram. No Prices

Procaine hydrochloride, USP, dms., 1,000-lb lots, frt. alld lb 2.83 - —
dms., 100-500 lb. lots .....lb 2.95 - 3.15

Progesterone, USP, bots.....gram. No prices.
Progesterone acetate, bots....gram. No prices.

Propane, indust., tanks, group 3, gal. .05 —
tanks, Baton Rouge.....gal. .05375- —
tanks, New York harbor..gal. .1005- —
(¼c. discount offered).

Propenyl guaethol, dms. .....lb.24.30 -27.00

Propionic acid, syn. pure, dms., c.l., works. lb. .23¼- —
dms., t.c.l., works..... lb. .24¼- —
tanks, works ..... lb. .20¾- —

n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., t.c.l., dlvd. ..... lb. .15¾- —
tanks, dlvd. ..... lb. .12¼- —

n-Propyl alcohol, dms., c.l., dlvd lb. .14 - —
dms., t.c.l. dlvd ..... lb. .15 - —
tanks, dlvd. ..... lb. .11½- —

n-Propyl gallate dms., 100 to 2,000-lb lots works lb. 3.90 - 4.40

n-Propyl p-Hydroxybenzoate, USP, dms lb. 2.30 - 2.40

Propyl thiouracil, bots., 50 kilo lots or more kilo 55.00 - —
bots., smaller lots ..... kilo.55.10 -55.30

n-Propylamine, dms., c.l., dlvd . lb. 1.24 - —
dms., t.c.l., same basis..... lb. 1.25 - —

Propylene dichloride, consumers, dms., c.l., dlvd. E lb. .0845- —
dms., t.c.l., same basis .... lb. .0950- —
tanks, same basis ..... lb. .07 - —
Propylene dichloride prices in West 1c. higher same basis.

Propylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., t.c.l., same basis..... lb. .17 - —
tanks, same basis ..... lb. .13½- —

USP, dms., c.l., dlvd. E..... lb. .18 - —
dms., t.c.l., same basis..... lb. .19 - —
tanks, same basis ..... lb. .15½- —

Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., t.c.l., same basis..... lb. .21 - —
tanks, same basis..... lb. .18½- —

Propylene oxide, dms., c.l., dlvd. E. lb. .18 - —
dms., t.c.l., dlvd. E ..... lb. .19 - —
tanks, dlvd. E ..... lb. .15½- —

Psyllium seed, black, bgs. ..... lb. .32 - .34
Blonde, bgs. ..... lb. .16 - .18
Husks, bgs. ..... lb. .39 - —

Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots. lb. .03¾- .04¼
bgs., smaller lots. ..... lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs., ton lots..lb. .06½- —
fine, bgs., ton lots.....lb. .04 - —
sun dried, coarse, bgs....ton.60.00 - —
fine, bgs. .....ton.60.00 -70.00

Pumpkin seed, bgs .....lb. .25 - .26

Pyrethrins, syn. (see Allethrin).

Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works.lb. .45 - —
Powd., 1.3% pyrethrins, bbls., works lb. .85 - —

Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works..gal. 8.75 - 8.95
100/1 basis (10 grams pyrethrins per 100cc odorless base) dms., works gal.41.75 -42.75

Pyrethrum oleoresin, dewaxed, 20%, dms., works lb.10.00 - —
purif., 20% dms., works .....lb.10.00 -10.10

Pyridine, denat., dms., c.l., works and frt. equald gal 2.77 - —
dms., t.c.l., same basis gal 2.80 - —
Refd., 2°, non-ret. dms., t.c.l., same basis lb. .75 - —

Pyridoxine hydrochloride, bots., 500-gram lots or more kilo.218.00 - —

Pyrites, Canadian, 48-50% S, mines, long-ton. 5.00 6.00

Pyrocatechol (see Catechol).

Pyrogallic acid, NF (see Pyrogallol).

Pyrogallic acid, tech., bbls .... lb 3.17 3.25
Pyrogallol, NF, 100 lb. dms..... lb 3.50 —
Pyroxylin, USP, bots..... lb. 9.50 - —

Q

Quassia chips ..... lb. .17 - —
Quebracho extract, clarified, grd., 70% tannin, bgs., works lb. .16½- .17
Clarified, liq., 35% tannin, bbls., works lb. .08¼ .08½
Solid, 64% tannin, bgs., c.l., ex dock lb. .106718- —
Ordinary solid 63% tannin, bgs., c.l. same basis lb. .099228 —
Quercetin, fib. dms. kilo lots kilo.26.40 - —
Quercitron extract, cryst. No. 1, bbls., t.c.l. lb. .40 - —
Liq., No. 1, bbls., t.c.l..... lb. .19 - —
Quicksilver (see Mercury metal)
Quince seed, bgs ..... lb. 2.00 Nom.

BECCO's high-purity Peracetic Acid is available for immediate delivery!

Seems that there are still a few people who don't know they can get immediate delivery on high-purity Peracetic Acid. Fact is, commercial quantities of Becco's Peracetic are available right now, in a solution of the following typical composition—uncontaminated with any other organic material:

CH_3COOOH....40% CH_3COOH....39%
H_2SO_4....1% H_2O....15% H_2O_2....5%
(Plus a stabilizer, 500 ppm)

Becco research has studied many epoxidation techniques and stands ready now, as always, to help you use high-purity Peracetic Acid to meet your particular epoxidation requirements. For example, under reaction conditions developed by Becco, high yields of epoxides are obtainable from a wide variety of difficult-to-epoxidize olefinics.

Moreover, this versatile oxidant has proved superior in the production of amine oxides, sulfones, metal salts, etc.

Becco Peracetic Acid is also widely used as a bleaching agent, as a germicide, and as a polymerization catalyst.

The essential points to remember are these: If you are currently using Peracetic Acid, rely on Becco as *the* source for the *high-purity* product. If you are not now using Peracetic, but would like to investigate its use in epoxidation reactions (or the use of H_2O_2, for that matter), Becco research will work with you—and there's no obligation on your part. Feel free to consult us.

In the meantime, you will find the following bulletins of interest—they're free at your request:

BULLETIN No. 4 — Peracetic Acid 40%

BULLETIN No. 69 — Epoxidation and Hydroxylation with Becco Hydrogen Peroxide and Peracetic Acid.

Progress in Peroxygens

BECCO CHEMICAL DIVISION

®BECCO

Food Machinery and Chemical Corporation
Station B, Buffalo 7, New York

fmc FOOD MACHINERY AND CHEMICAL CORPORATION

FMC CHEMICALS INCLUDE: BECCO Peroxygen Chemicals • WESTVACO Phosphates, Barium and Magnesium Chemicals • WESTVACO Alkalis, Chlorinated Chemicals and Carbon Bisulfide • NIAGARA Insecticides, Fungicides and Industrial Sulphur • OHIO-APEX Plasticizers and Chemicals • FAIRFIELD Pesticide Compounds and Organic Chemicals

Quinidine Sulfate—Soda, Caustic

Quinidine sulfate USP cns. 1,000-oz. lots oz. .74½- .75
Quinine, NF cns. 100-oz. lots oz. .54 - —
Quinine bisulfate USP cns., 100-oz. lots oz. .28 - .29
Quinine hydrochloride cns. 1,000-oz. lots oz. .32 - —
Quinine sulfate USP cns. 1,000-oz. lots oz. .27½- .29
Quinoline, dms. c.l. frt. equald lb. .50¾- —
dms., l.c.l. same basis lb. .51¼- —
tanks, same basis lb. .50 - —

R

R salt, paste, dms. frt. alld., 100% basis lb. .88 - —
Powd. frt. alld. 100% basis lb. .98 - —
Rapeseed oil, dms., lb. .17½- .18
tanks lb. .16 - —
Rare earth oxalate, 45-50%, bgs., works lb 1.00 - —
Rauwolfia serpentina root powd. bbls., dms lb. 1.00 - —
Red, carmine No 40 (see Carmine)
Red oil (see Oleic acid)

Red Pigments

Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red).
Red, saunders, NF powd. bbls lb. .35 - .40
Reserpine, cryst., bots. gram. 1.40 - 1.60
Resorcinol, tech grade, dms. c.l., works frt. equald lb. .77½- —
dms., l.c.l. same basis lb. .78½- —
USP, cryst., dms works lb 2.75 - —
powd., dms. works lb 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs. lb. 15 - .16
Rhodamine red toner, molybdated, PMA, kgs lb. 6.00 - —
Tungstated, PTMA works kgs lb 6.60 - —
Rhodinol, 5-lb. cans lb.43.00 -46.00
Synthetic lb 15.00 -16.00
Rhubarb root, India, whole, bgs lb. 30 - —
Powd., bgs. lb. .38 - —
Riboflavin, USP 5lb dms., kilo or more dlvd kilo.40.00 - —
USP, readily soluble bots dlvd. kilo 130.00 - —
Riboflavin, 5-phosphate-sodium 5lb. dms., kilo or more dlvd. kilo.107.50 - —
Rice bran oil, clarified, dms., l.c.l. lb. .15¼- —
tanks, dlvd. E lb. .13½- —
Rice starch (see Starch rice).
Ricinoleic acid (see Castor oil acids, split).
Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Coaltar pitch roofing)
Rose oil, nat., Bulgarian bots oz.72.00 —
Turkish, bots. oz.55.00 -58.00
Rosemary oil, Spanish, NF cns., dms. lb. 1.05 - 1.65
tech., cns., dms. lb. .50 - 1.20
Rosin, gum and wood (see Naval Stores in Protective Coatings market)
Rotenone, 5lb. dms., works, unit-lb. .12 - —
resin, 25-45% 5lb dms. works, unit-lb. .12 - —
Rottenstone, bgs., 8-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum tanks, Calif. ex tax, San Francisco gal. .178 - —
tanks, east coast, N. J., N. Y. gal. .19 - —
tanks, group 3 gal. .13375- —
Rue oil, bots. lb. 2.75 - 3.00
Rutin, NF 5lb dms., 10 kilo lots kilo.16.50 - —
5lb. dms., 5 kilo lots kilo.17.00 - —
5lb. dms., 1 kilo kilo.18.00 - —
Ryania, 100%, powd., bgs., c.l., works lb .22 - —
bgs. l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium 5lb dms. 1,000-lb lots works lb 2.50 - —
USP, gran., soluble, dms., 1,000-lb. lots lb. 1.60 - —
dms., smaller lots lb 1.70 - 1.80
USP, powd., soluble, insoluble, dms., 1,000-lb lots lb 1.65 - —
dms., smaller lots lb 1.75 - 1.95
Safflower oil, dms., New York lb. .1835- .1865
tanks, Atl. Coast lb. .1635- —
Safrol, dms. lb. .80 - .85
Saffron, Mancha Superior, tins lb.34.00 - —
Sage, Dalmatian, bgs. lb. .36 - .40
Greek, cns. lb. .14 - —
Italian, cns. lb. .15 - —
Sage oil, clary, bots. lb.25.00 -32.00
Dalmatian cns. lb. 3.75 4.00
Spanish cns. lb 1.20 1.45
Sago flour raw bgs. lb .07 .07¼
Refd., bgs. lb. .09 - .09¼
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b. plant, frt. equald lb. 1.23 - —
dms. l.c.l., same basis lb 1.25 - —
Salicylamide, 100-lb. dms lb. 1.00 - 1.10
Salicylic acid, crude, 5lb dms., c.l., t.l., frt alld lb. .37¼ —
5lb dms. l.c.l., frt alld. on 100 lbs or more lb. .38½- —
sublimed, tech., 5lb dms., c.l., t.l., dlvd lb. .39¼- —
5lb. dms., l.c.l. dlvd. lb. .43½- —
USP, cryst., 200-lb. 5lb. dms., 1,000-lbs or more lb. .50½- —
200-lb 5lb. dms. less than 1,000 lbs. .53½- —
100 lbs. 5lb. dms. 1,000 lbs. or more lb. .52½- —
100-lb. 5lb. dms., less than 1,000 lbs lb. .55½- —
Powd., 100 lb. 5lb. dms., 1,000 lbs. or more lb. .57½- —
100-lb. 5lb. dms., less than 1,000 lbs lb. .60½- —
Salol, NF, gran., bbls. kgs. lb 1.20 —
Powdered salol, 25c per lb higher
Salt, rock, paper bgs., c.l. 100 lbs. 1.09 - —
Salt, table vacuum, common, fine, paper bgs. c.l. 100 lbs. 1.34 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton.28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood, E. Indian chips, bgs. lb. .63 - .66
powd., 5lb. dms. lb. .75 - .76
Sandalwood oil, cns. lb.13.25 -14.75
Sardine oil, crude, tanks, Pac. coast lb No stocks
Sassafras oil, artif., dms. lb. .50 - .75
Nat., dom., dms lb. 1.70 - 2.15
Savin oil, USP, cns. lb. 7.50 - —
Savory oil, cns lb. 4.25 - —
Schaeffer's salt paste, dms., frt. alld. 100% basis lb. .85 - —
Powd. bgs., frt alld. 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, bots oz.13.00 -15.90
Sebacic acid, CP, dms., c.l., works, lb. .69½- —
dms., l.c.l., works lb. .71½- —
Purified, dms., c.l., works lb. .65½- —
dms., l.c.l., works lb. .67½- —
Seidlitz mixture 5lb dms. 5,000-lb. lots lb. .30½- —
5lb. dms., smaller lots lb. .31 - .33
Selenium, powd., 99½%, dms., dlvd. lb. 7.00 - —
Senega root, bls. lb. 2.10 - —
Senna leaves, Alexandria, whole and half, bls lb. .19 - —
siftings lb. .17 - —
Tinnevelly, No. 1, bls. lb. .19 - .20
No. 2, bls. lb. .16 - .17
No. 3, bls. lb. .14 - —
pods, bls. lb. .30 - —
powd., bbls., bxs lb. .17 - —
Serpentaria root, bls. lb. 6.50 - 7.00
Sesame oil, USP, dms. lb. .38 - .39
Sesame seed, Columbian, bgs. lb. .15¼- —
Lebanese hulled, bgs. lb. .19 - —
Nicaraguan hulled shipt., bgs., lb. .24½- —
nat., bgs. lb. .16 - —
Salvadorian, nat., bgs lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .46 - —
bbls., 1,500-lb. lots lb. .47 - —
kgs., 1,500-lb. lots lb. .48 - —
Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb. higher for all packages.
Shellac, bleached, refd., bgs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .38 - .39
lemon No. 2, bgs., 10-bg. lots lb. .36 - .37
superfine, bgs., 10-bg. lots lb. .34 - .35
TN, bgs., 10-bg. lots lb. No Stocks
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., l.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18¼
paper bgs., l.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs., l.c.l., works lb. .07 - .17
Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works ton.25.00 - —
bgs. l.c.l. works, ex whse. ton.45.00 -55.00
hard-quartz, 99½%, 325 mesh, bgs., c.l. works ton.20.00 - —
bgs., l.c.l., works ton.25.00 - —
99½%, 140 mesh bgs., c.l., works ton.15.00 - —
bgs., l.c.l., works ton.20.00 - —
Silicon tetrachloride tech., dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .22 - .30¼
tanks, works lb. .17 - —
Silver bullion, ingots, cs. Troy oz. .88⅛- —
Silver cyanide, bots., 1,000-oz. lots, oz. .89¼- —
bots., 500-oz. lots oz. .90 - —
bots., 100-oz. lots oz. .91 - —
Silver nitrate, CP, cryst., bots., 2,500-oz. lots oz. .63¾- —
bots., 1,000-oz. lots oz. .63⅝- —
bots., 500-oz. lots oz. .64¼- —
bots., 250-oz. lots oz. .64⅜- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.15 - —
Strong, NF, bots. dms., 1,000-oz. lots oz 1.10 - —
Snakeroot oil, Canada, cns. lb.45.00 -60.00
Soapbark, crushed, bls. lb. .35 - —
Powd., bls. lb. .35 - —
Whole, bls. lb. .30 - —
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., l.c.l., stock pts. 100 lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.80 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs., l.c.l., stock pts. 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 - —
Liq., 50%, sellers tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 - 3.00

Here's why WEST END can answer any inquiry immediately!

When you phone an order or request information, the Sales Office Manager in Oakland with whom you speak can contact the plant at WEST END immediately. He talks by private wire teletype with the Production Manager on product availability . . . Shipping Superintendent on packaging, transport facilities, dates and car numbers . . . Technical Director on detailed specifications . . . Plant Manager on the development of products to meet new applications or specifications.

An answer or firm commitment is given immediately. It is relayed to you often while you are still on the phone.

WEST END 's Sales Office Manager sales representatives and plant executives work together as a team manning a system that is, in our opinion, uniquely outstanding in the chemical industry. Their confidence in the efficiency of this system is reflected in the enthusiastic, helpful and friendly manner in which they promptly serve you . . . our customers.

WEST END CHEMICAL COMPANY
DIVISION OF STAUFFER CHEMICAL COMPANY
1566 WEBSTER, OAKLAND 12, CALIF. • PLANT, WESTEND, CALIF.

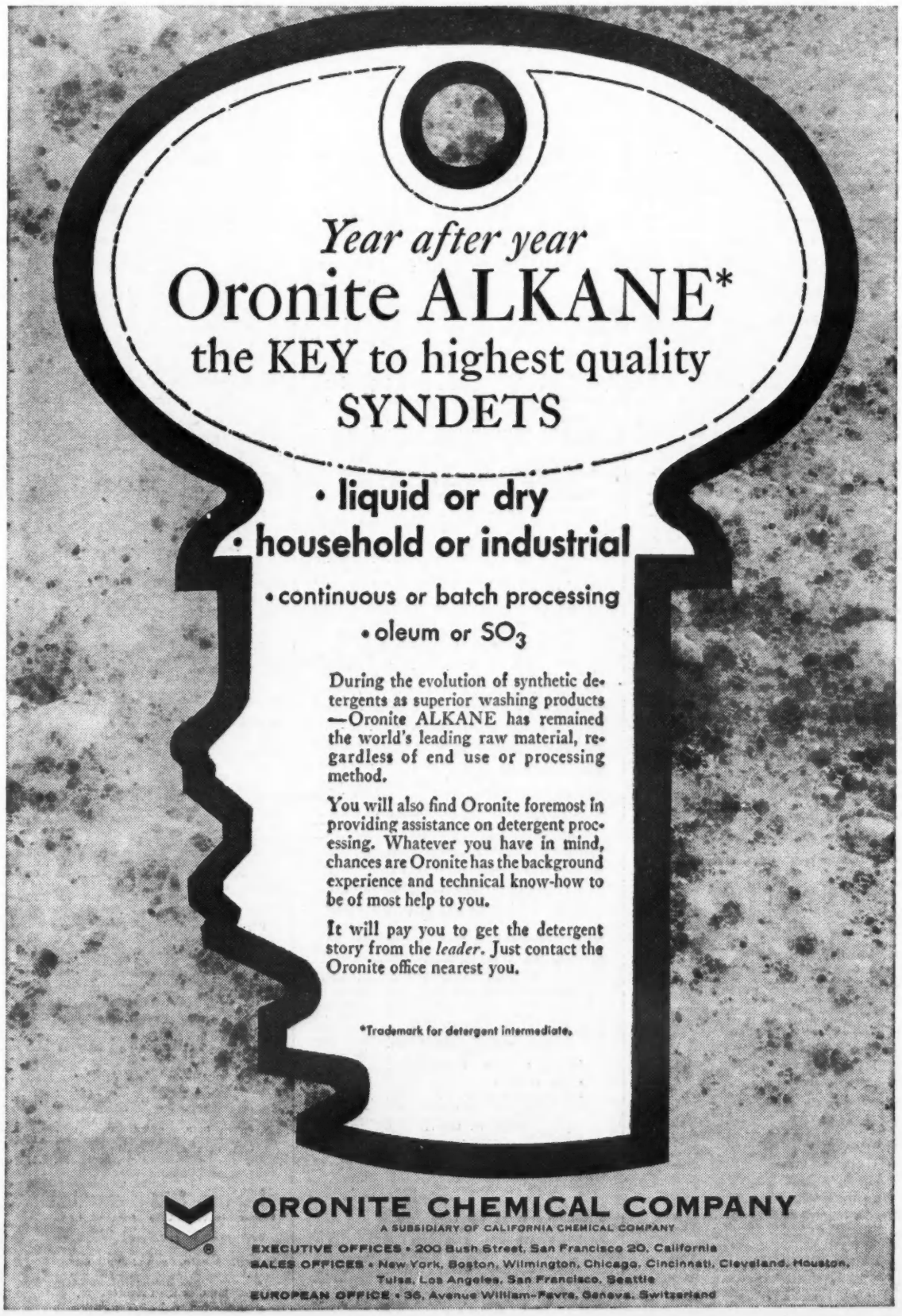
SODA ASH
SODIUM SULFATE
BORAX • HYDRATED LIME

Soda, caustic, liq., 73%, sellers' tanks, works, dry basis 100 lbs. 3.00 • —
73%, rayon type, sellers' tanks, works, dry basis 100 lbs. 3.00 • 3.10
Solid, 76%, dms., c.l., works 100 lbs. 4.80 • —
Soda, sal. conc., bgs., c.l., works 100 lbs. 2.50 • —
bgs. smaller lots, works 100 lbs. 2.80 • —
Sodium acetate, annyd., bgs., c.l., dlvd. E lb. .14½- —
bgs. l.c.l., same basis lb. .16½- —
NF, 60%, gran. dms., c.l., works lb. .15½- —
dms., l.c.l., works lb. .17½- —
Sodium alginate, NF, white powd., dms., 300 lbs or more lb. .93 • —
Sodium p-aminosalicylate, dms., 100-lb lots or more, frt. adjusted lb. 2.70 • —
Sodium antimoniate, bgs., c.l., dlvd. E lb. .25½- —
bgs., l.c.l., dlvd E lb. .27 • —
Sodium arsenate 60% arsenic pentoxide, dealers, dms., ton or more, works lb. .26 • —
dms., less than ton lots, works lb. .26½- —
Sodium arsenite 90% pink powder, 75% arsenious oxide, dealers, dms., ton lots or more, works, lb. .17½- —
dms., less than ton lots, works, lb. .18 • .19
Sodium ascorbate, dms., 25-50 kilo lots kilo.10.00 • —
dms., 10-kilo lots kilo.10.35 • —
dms., 5-kilo lots kilo.10.75 • —
dms., 1-kilo lots kilo.11.00 • —
bots., 500-gram bots kilo.11.50 • —
Sodium benzoate, tech, c.l. t.l., frt. alld lb. .35 • —
dms., l.c.l., same basis lb. .39 • —
USP, c.l., t.l., frt. alld lb. .38 • —
ton lots, same basis lb. .43 • —
1,000-lb. lots, same basis lb. .45 • —
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 • —
bgs., l.c.l., works 100 lbs. 3.85 • —
USP, powd., bgs., c.l., works, 100 lbs. 2.55 • —
bgs., l.c.l., works 100 lbs. 3.45 • —
Sodium bichromate, gran., bgs., c.l., t.l., works lb. .13 • —
bgs., l.c.l., works lb. 13½- .14¾
Sodium bifluoride, bbls, c.l., works, frt. equald lb. .19½- —
bbls., l.c.l., same basis lb. .1990- —
Sodium bisulfate, bulk, c.l., works 100 lbs. 2.00 • —
dms., c.l., frt. equald 100 lbs. 3.00 • 3.60
dms., l.c.l., frt. equald 100 lbs. 3.50 • 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs. 5.00 • —
bgs., l.c.l., works 100 lbs. 5.45 • —
Soln., 35°, bbls., c.l., works 100 lbs. 1.70 • —
bbls., l.c.l., works 100 lbs. 2.20 • —
Sodium borate (see Borax)
Sodium bromide, USP, gran., dms., works lb. .40 • —
Sodium carbonate, cryst., monohydrated (see Soda, sal)
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs. 3.10 • —
bgs., l.c.l. works 100 lbs. 3.50 • —
Sodium carboxymethyl cellulose (see CMC)
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 • —
dms., l.c.l., works lb. .09½- .10½
Sodium chlorate in 100-lb. dms. only, ¼c. per lb. higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb. .05 • —
Sodium chlorite, tech., dms., c.l., works lb. .58 • —
dms., 20-dm. lots or more, works, lb. .66 • —
dms., smaller lots, works lb. .70 • .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 • —
dms. l.c.l. works lb. .28 • —
Sodium chromate, anhyd., fib. dms., c.l., t.l., works lb. .14¾- —
fib. dms. l.c.l. works lb. .15¼- .16½
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
bgs. l.c.l. lb. .1065- .1190
Sodium citrate, anhyd., dms. lb. .62 • —
NF VIII, gran., dms lb. .26½- .27½
USP. XIV gran. dms lb. .29½- .30½
Sodium citrate, USP powd. prices ½c. higher.
Sodium cyanate, dms. 1,000-lb. lots, works lb. .85 • —
dms., smaller lots, works lb. .90 • 1.10
Sodium cyanide, flake, 96-98%, dms., c.l. or 20,000-lb lots lb. .193 • —
dms., over 1,000-lb. lots lb. .203 • —
dms., 100-lb. to 1,000-lb. lots lb. .213 • —
Gran. sodium cyanide 1c. higher.
Sodium diacetate, 33-35% acidity, 250-lb. dms., works lb. .15 • —
250-lb. dms. l.c.l. works lb. .15¾- —
Anhyd., dms., c.l., works lb. .18 • —
dms., l.c.l., works lb. .18¾- —
Sodium dimethyl dithiocarbamate, 40% soln., dms., c.l., t.l., frt. alld., 100% basis lb. .42 • —
dms., l.c.l., l.t.l., same basis lb. .47 • .52
tanks, same basis lb. .38 • —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs., smaller lots lb. .14 • —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
Solium fluoride, white, 97%, fib. dms., l.c.l., works, frt. equald lb. .1430- —
Sodium formate, bgs., c.l., works, 100 lbs. 7.90 • —
bgs., l.c.l., works 100 lbs. 8.65 • —
Sodium gentisate, 100-lb. fib. dms. lb. 5.50 • —
Sodium gluconate, refd., dms. lb. .84 • —
Tech., dms., bgs. lb. .37 • .39
Sodium hydride powd. dms., works, lb. 1.90 • 2.75
Sodium hydrosulfide (see Sodium sulfhydrate)
Sodium hydrosulfite, dms., c.l., frt. alld lb. .23¾- —
dms., l.c.l., frt. alld lb. .24¾- —
Sodium hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots, to. .23½- .28
Sodium hydroxide, tech. (see Soda, caustic).
Sodium hypophosphite, NF, dms., 1,000-lb. lots lb. .97 • —
Sodium hyposulfite, anhyd., photo grade, bgs., c.l., works, 100 lbs. 7.50 • 8.05
bgs., l.c.l., works 100 lbs. 7.89 • 8.45
Sodium hyposulfite, tech., bgs., c.l. works 100 lbs. 7.25 • —
bgs., l.c.l., works 100 lbs. 7.60 • —
Sodium hyposulfite hexahydrate, pea, cryst., bgs., c.l., works 100 lbs. 5.15 • —
bgs. l.c.l. works 100 lbs. 5.55 • —
Sodium hyposulfite hexahydrate, photo grade, bgs. c.l., works, 100 lbs. 7.75 • —
bgs., l.c.l., works 100 lbs. 8.05 • —

Sodium hyposulfite pentahydrate, tech., bgs., c.l., works, 100 lbs. 4.65 • 5.15
bgs., l.c.l., works 100 lbs. 4.90 • 5.55
Sodium iodide, USP, 300-lb. dm. lb. 1.96 • —
Sodium lactate, edible, 60%, cbys., dms. works lb. .26½- —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .19 • —
dms., l.c.l., dlvd lb. .19½- .20¼
tanks, dlvd lb. .18 • —
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate, octahydrate, gran., bgs., c.l. works ton.92.00 • —
bgs., ton lots, ex whse ton.150.00 • —
bgs., smaller lots, ex whse ton.155.00 • —
Sodium metaborate tetrahydrate, bgs., c.l. works ton.200.00 • —
bgs., ton lots, ex whse ton.268.50 • —
bgs., smaller lots, ex whse ton.273.50 • —
Sodium, metallic, bricks, c.l. works, lb. .19½- —
Fused, 18,000-lb. lots or more, works lb. .19 • —
tanks, works lb. .17 • —
Sodium metanilate, bbls., frt. alld. lb. .62 • —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 • —
bgs., 6,000-19,900 lb lots, works, 100 lbs. 6.05 • —
dms., c.l., works 100 lbs. 6.20 • —
dms., l.c.l., works 100 lbs. 6.55 • —
gran., fib. dms lb. .17½- .18
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs. 4.45 • —
bgs., l.c.l., works 100 lbs. 4.80 • 6.75
dms., c.l., works 100 lbs. 4.95 • —
dms., l.c.l., works 100 lbs. 5.30 • 7.25

Sodium molybdate, anhyd., dms., works, frt equald lb. .92 • .96
Cryst., dms., works, frt alld lb. .73 • .74
Sodium monoglutamate (see Monosodium glutamate)
Sodium monohydrate (see Sodium carbonate monohydrated)
Sodium naphthionate, bbls lb. .70 • —
Sodium nitrate, dom., crude, bgs., c.l. works ton.48.75 • —
bulk, c.l., works ton.45.25 • —
Imp., 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton.49.75 • —
ton.49.75 • —
bulk, c.l., same basis ton.46.25 • —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 9.00 • —
bbls., l.c.l., same basis 100 lbs.11.00 • —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 • —
dms., l.c.l., works 100 lbs. 7.05 • 7.65
Sodium orthosilicate, hydrated, flake, bbls., c.l., works, 100 lbs. 5.65 • —
bbls., l.c.l., works 100 lbs. 7.60 • 7.90
Sodium oxalate, 98% bgs., works, 100 lbs.12.35 • —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, bgs., c.l. works, frt. equald lb. .28 • —
bgs., l.c.l., same basis lb. .27½- .34
Pellets, bgs., c.l., same basis lb. .26 • —
bgs., l.c.l., same basis lb. .27½- .34

Sodium pentachlorophenate, powd., bgs., dms., c.l., same basis lb. .25 • —
bgs., dms., l.c.l. same basis lb. .26½- .33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads, ¼c per lb over carlot prices.
Sodium pentobarbital, USP, dms., 100 lbs. or more lb. 6.00 • —
Sodium perborate, NF, tech., bgs., c.l., works lb. .19 • —
bgs., l.c.l., works lb. .21 • —
Sodium peroxide, dms c.l., t.l. dlvd. E. of Miss lb. .20½- —
dms., l.c.l. same basis lb. .21 • .21¼
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 • —
Sodium phenolsulfonate, USP IX, gran., dms lb. .50 • .51
NF, powd., dms. lb. .53 • .54
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt equald. 100 lbs. 7.95 • —
bgs., l.c.l., same basis 100 lbs. 8.35 • 9.40
Dibasic, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 • —
bgs., l.c.l., same basis 100 lbs. 8.10 • —
Sodium phosphate, dibasic, USP, dried, powd., bgs., dms., works lb. .19 • .20¼
Sodium phosphate, monobasic, anhyd., bgs., c.l., frt. equald. 100 lbs. 9.00 • —
bgs., l.c.l., same basis 100 lbs. 9.40 -10.00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SYNDETS
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• continuous or batch processing
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ORONITE CHEMICAL COMPANY
A SUBSIDIARY OF CALIFORNIA CHEMICAL COMPANY
EXECUTIVE OFFICES • 200 Bush Street, San Francisco 20, California
SALES OFFICES • New York, Boston, Wilmington, Chicago, Cincinnati, Cleveland, Houston, Tulsa, Los Angeles, San Francisco, Seattle
EUROPEAN OFFICE • 36, Avenue William-Favre, Geneva, Switzerland

Sodium phosphate, tribasic, anhyd., bgs., c.l., frt. equald. 100 lbs. 9.05 - —
bgs., l.c.l. frt. equald. 100 lbs. 9.45 - 10.05
Cryst., bgs., c.l., t.l., frt. equald. 100 lbs. 4.60 - —
bgs., l.c.l., frt. equald 100 lbs. 5.00 - 5.75
Sodium phosphate in dms. 60c to 80c higher than bgs
Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate, acid, bgs., c.l. works, frt equald. 100 lbs 11.10 —
bgs., l.c.l., same basis 100 lbs. 11.85 - 12.35
Sodium pyrophosphate ferric, dms., c.l., t.l., works lb. .36 - —
dms. l.c.l. works lb. .37 - .39
Sodium pyrophosphate, tetrabasic, anhyd., bgs., c.l., works, frt equald 100 lbs. 7.81 - —
bgs., l.c.l., same basis 100 lbs. 9.21 - 9.71
Sodium salicylate, USP, dms., 1,000-lbs. or more lb. .78½- —
dms., less than 1,000 lbs.. dms. lb. .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs 2.35 —
bgs l.c.l divd zone 1 100 lbs 4.10 - 4.35
divd. zone 2 100 lbs. 4.35 - 4.60
divd. zone 3 100 lbs 4.75 - 4.90
divd Zone 4 100 lbs 5.35 - 5.60
Sales zones are: (1) All states E. of Miss., R. and N. of south bound of Ky and Va., Ala., La., and Miss. south of 31° Tex E of 100°; S. of 31° Fla.) also Me., N H., and Vt., in which there are special county zones; Davenport, Ia., and St Louis; (2) Ark E of 98° Ga.; Iowa (except Davenport), Minn Mo. (except St Louis) Neb E. of 98° N C., S C., Tenn and Tex. N of 31° and E. of 100° (except Wichita Falls); also Ala., La and Miss. No of 31°; (3) Ark W. of 96°. Kan., Neb W. of 98°, N D., Okla., S D., Tex., W of 100° (including Wichita Falls excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo and El Paso, Tex
Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs. 5.70 - —
dms., c.l., t.l., works 100 lbs. 6.20 - —
hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works. 100 lbs. 5.35 - —
Sodium sesquisilicate, hydrated, dms., c.l., works 100 lbs. 5.50 - —
dms., 6,000-19,900 lb lots, works. 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be, turbid, 1:3.2, dms., c.l., works, 100 lbs 1.55 - —
dms., l.c.l., works 100 lbs 1.90 2.40
tanks, works 100 lbs 1.20 - —
47° Be, turbid, 1:2.9, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs 1.90 - —
Sodium silicate, liq., 52° Be, turbid, 1:2.4, dms., c.l., works, 100 lbs. 2.63 - —
dms., l.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs 2.30 - —
Solid, 1:3.2, bgs., works ton.67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .063 - —
bgs., l.c.l., works lb. .069 - —
Sodium silicofluoride in dms., 0.4c. per lb. higher.
Sodium stannate, dms., works, frt. alld. E. lb. .603 - .662
Sodium sulfa drugs (see Sulfa names).
Sodium sulfanilate, bbls., works lb. .23 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd., bgs., c.l., divd. E ton.54.00 - —
detergent, rayon grade, bgs., c.l., works ton.36.00 - —
bulk, c.l., works ton.32.00 - —
USP, cryst., fib. dms lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald, lb. .07¼- —
dms., l.c.l., same basis lb. .08¼- —
Liq., 40-44% tanks works, 100% basis ton.130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
fused, bbls., c.l., works, E., frt. equald lb. .05½- —
bbls., l.c.l., same basis lb. .06½- —
Sodium sulfite, anhyd., bgs., c.l. works 100 lbs. 7.35 - —
bgs. l.c.l. same basis 100 lbs. 7.95 - —
Tech., bgs. c.l., works 100 lbs. 3.50 - —
bgs. t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate)
Sodium tetraborate (see Borax)
Sodium tetrasulfide, liq., 40%, dms., c.l. works, frt. equald lb. .04½- —
dms., l.c.l., same basis lb. .05½- —
Sodium thiocyanate, CP, dms. lb. .55 - .65
Tech. anhyd., dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .337 - —
Sodium thiosulfate, NF, cryst., bbls. lb. .13¼- —
Sodium thiosulfate, tech. (see Sodium hyposulfite).
Sodium titanate, ctns., c.l., works, lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton or less, works lb. .14¾- —
Sodium trichloroacetate, 94%, 100-lb dms., c.l., frt. alld E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E lb. .35½- —
10-lb. cns., c.l., frt. alld. E lb. .42 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¼c per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 8.16 - —
bgs., l.c.l., same basis 100 lbs. 8.56 - 9.06
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.95 - —
bgs., l.c.l., works 100 lbs. 9.70 - 13.13
dms. c.l., works 100 lbs. 9.45 —
dms., l.c.l., works 100 lbs. 10.20 - 10.60
Sodium tungstate, tech., bgs., divd. E lb. 1.18 Nom.
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., divd lb. .21 - —
dms., l.c.l., same basis lb. .21½- —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt. equald. gal. .30 - .35½
Solvent naphtha, petroleum, aromatic 312°-365°F. b.r., 17.2°C. m.a.p., tanks, New Jersey gal. .345 - —
315°-350°F. b.r., 17.2°C. m.a.p., tanks, Texas City gal. .35 - —
342°-351°F. b.r., 15°C. m.a.p., tanks, Baytown, Texas gal. .32 - —
Solvent naphtha, petroleum, aromatic, 319°-348°F b.r. 16.5°C m.a.p., tanks, Houston gal. .32 - —
322°-350°F. b.r., 17.2°C. m.a.p., tanks, Baytown, Tex gal. .29 - —
334°-392°F. b.r., 19°C. m.a.p., tanks, Philadelphia gal. .25 - —
362-412° F b.r., 17.5°C m.a.p., tanks, Houston gal. .32 - —
365°-404°F b.r. 19 C. m.a.p., tanks, New Jersey gal. .43 - —
367°-421°F b.r. 20°C. m.a.p., tanks, Baytown, Tex gal. .30 - —
Solvent naphtha, petroleum, partial aromatic, 205°-282°F b.r., 38°C m.a.p. tanks, New Jersey gal. .24 - —
211°-277°F. b.r. 15.6°C. m.a.p., tanks, New York, New Jersey gal. .28 - —
212°-293°F b.r., 38°C m.a.p., tanks, Philadelphia gal. .24 - —
221°-278°F b.r. 34.8°C m.a.p., tanks, Houston gal. .20 - —
266°-374°F b.r. 24°C m.a.p., tanks, Philadelphia gal. .25 - —
283°-325°F b.r., 41.6°C. m.a.p. tanks Houston gal. .23 - —
284°-383°F b.r., 35°C m.a.p., tanks, Philadelphia gal. .27 - —
357°-403°F. b.r., 34°C.. m.a.p., tanks, Houston gal. .20 - —
358°-401°F. b.r., 24.4°C. m.a.p., tanks, New Jersey gal. .38 - —
Sorbitan monostearate fib dms., 20,000-lb. lots, works lb. .33 - —
fib dms. 10,000 to 20,000-lb lots, works lb. .35 - —
fib. dms., smaller lots, works lb. .38 - .40
Sorbitan tristearate, fib dms. 20,000-lb. lots, works lb. .34 - —
fib dms. 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, cryst. resin grade, pellets, dms., c.l., works lb. .23 - —
dms. 1 to 5-ton lots, works, lb. .25 - .26
Powd., dms., c.l., works lb. .36 - —
dms., 1 to 5-ton lots, works, lb. .38 - .39
Soln., coml., aqueous, dms., c.l., works lb. .24¼- —
dms. ton lots works lb. .25 - —
dms., smaller lots, works lb. .25¼- —
tanks, works lb. .23¼- —
NF, reg., 70% aqueous, dms., c.l., works lb. .16 - —
dms. ton lots works lb. .16¾- —
dms. smaller lots works lb. .17 - —
tanks works lb. .15 - —
Soya protein, chemically isolated, old process, bgs., c.l., works, lb. .23 - —
bgs., l.c.l., works lb. .23½- —
Chemically isolated, new process, bgs., c.l., works lb. .19 - —
bgs., l.c.l., works lb. .19½- —
Soybean meal, 44% bulk, Decatur. ton.62.00 - —
Soybean oil, crude, tanks, Decatur. lb. .09¾- —
Foots, soapstock, acid 95%, tanks, N. Y. lb. .04¼- —
Refd., alkali, dms. lb. .1448- .1475
tanks lb. .1248- —
Clarified, dms. lb. .1398- .1425
tanks lb. .1198- —
Salad, dms. lb. .14½- .14¾
tanks lb. .12½- —
Soybean oil acids, dbl. dist., dms. lb. .19 - .21½
tanks lb. .16½- —
Single-distilled, dms. lb. .17¾- .20¼
tanks lb. .15¼- —
Soybean pitch, dms., works lb. .05 - .05¼
Sparteine sulfate, cns. oz. .80 - .90
Spearmint leaves, dom. bls. lb. .75 - —
Spearmint oil, NF, dms. lb. 5.50 - 6.35
Sperm oil, bleached, winter, 45°, dms. lb. .1625- .17
tanks lb. .1450- —
Nat., winter, 45°, dms. lb. .1525- .16
tanks lb. .1350- —
Spermaceti wax, blocks, cs. lb. .31 - .34
Cakes, cs lb. .32 - .34
Spruce extract, liq., reg tanks, works lb. .01¾- —
Powd., super, bgs., c.l., works, lb. .05¼- —
bgs., l.c.l., works lb. .05½- —
Spruce oil, crs., dms. lb. 2.10 - 3.35
Squill, white bls lb. .16 - .18
powd., bbls., bxs lb. .17 - .20
St. John's bread, edible, bls lb. .14 - .16
Stannic chloride, anhyd., dms., works lb. .762 - .772
Stannic oxide, dms., divd. lb. 1.02 - 1.03
Stannous chloride anhyd., dms., works lb. .958 - 1.453
Stannous chloride, hydrous, cryst., dms., works lb. .83 - .84
Stannous sulfate, dms., works lb. 1.015 - 1.035
Starch, corn pearl paper bgs., c.l. 100 lbs. 7.38 - —
paper bgs., l.c.l. 100 lbs. 7.53 - —
Powd., paper bgs, c.l. 100 lbs. 7.50 - —
paper bgs., l.c.l. 100 lbs. 7.65 - —
Prices for corn starch in cotton bags, 15c. per 100 lbs. higher.
Starch, potato, dom., Idaho, bgs., c.l., works lb. .0635- —
Maine, bgs., c.l., works lb. .06¼- .06½
bgs., l.c.l., ex whse, New York. lb. .08¾- .10
Starch, rice, bgs., ex whse lb. .14 - .15
Starch, wheat, bgs. lb. .08½- .09
Star root (see Helonias root).
Stargrass root (see Aletris root).
Stavesacre seed, bgs lb. .60 - .81
Stearic acid, dbl. pressed, bgs lb. .16 - .18½
Single-pressed, bgs. lb. .15½- .18
Triple-pressed, bgs. lb. .18¼- .20¾
Stearine, oleo (see Oleostearine)
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, western Pennsylvania, gal. .16 - —
tanks, group 3 gal. .13375- —
tankwagon, Boston gal. .20 - —
Chicago gal. .209 - —
Cleveland gal. .23½- —
Los Angeles, ex tax gal. .190 - —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 - —
Stramonium leaves, bgs. lb. .18 - .20
Streptomycin hydrochloride, bulk, gram. .0650- .0675
Streptomycin sulfate, bulk gram. .0650- .0675
Strontium bromide, NF, cryst., 150-lb. fib. dms lb. .84 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works, lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate, fib. dms., works, lb. .49 - —
Strontium iodide, jars, 25-lb. lots, lb. 3.57 - —
Strontium nitrate, bgs., c.l., works, 100 lbs.11.00 - —
bgs., l.c.l., works 100 lbs.12.00 - —
Strontium salicylate, NF, dms lb. 1.88 - —
Strontium sulfate, air floated, 90% 325 mesh, bgs., works ton.56.70 -66.15
Strophanthin G (see Ouabain, USP).
Strophanthin K, bots oz.23.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 3.75
Styrax gum, USP, cs. lb. 3.00 Nom.
Styrene monomer, polymer grade, 99.6% dms. c.l. frt. alld. lb. .17 - —
dms., l.c.l., same basis lb. .19 - —
tanks same basis lb. .14½- —
Tech., 99.2%, dms., c.l. lb. .1512- —
dms., l.c.l., same basis lb. .1712- —
tanks, bulk, same basis lb. .1262- —
Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor and prices in the three major sections of the Wholesale Commodity Price Index.
Styroyl acetate bots lb. 1.25 - 1.45
Succinic acid, purif., cryst., bbls., works lb. .62 - .75
Sucrose, refd. white, bgs. refy E. lb. .0935- —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots bgs., l.c.l., works lb. .84 - —
Sugar (see Sucrose)
Sugar cane wax, dom., refd., slabs, 50-lb ctns., works lb. .65 - .75
50-lb ctns., spot lb. .67½- 72¼
Sulfabenzamide dms kilo. 8.80 - 9.90
Sulfabenzamide-sodium, dms kilo 9.00 -10.10
Sulfacetamide USP fib dms kilo. 7.70 - 8.80
Sulfacetamide-sodium, USP, fib. dms kilo. 8.15 - 9.25
Sulfadiazine USP, microcrystals, dms kilo.23.35 -24.45
USP, powd., dms kilo.22.60 -23.70
Sulfadiazine-sodium, USP, dms.kilo.24.80 -25.90
Sulfaguanidine NF X, dms kilo 5.50 - 6.60
Sulfamerazine, USP, microcrystals, dms kilo.23.50 -24.60
Sulfamerazine-sodium, USP, powd., dms kilo.24.80 -25.90
Sulfamethazine, microcrystals, USP XV, dms kilo.19.65 -20.75
Powd., dms kilo.18.75 -19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs.16.00 - —
dms. l.c.l. t.l.l. works 100 lbs.17.50 -18.50
100 lbs. or more lb. 6.00 - —
gran., dms., c.l., t.l., works, 100 lbs.14.75 - —
dms., l.c.l., t.l.l., works 100 lbs.16.25 -17.25
Sulfanilamide NF X 30-80 mesh, dms kilo 3.05 - 3.50
NF X, microcrystals, dms kilo. 3.79 - 4.20
NF X, powd., dms kilo. 2.85 - 3.30
Sulfanilamide quinoxaline, veterinary dms kilo.14.13 -14.85
Sulfanilic acid, tech. dms. c.l., frt. alld lb. .21 - —
dms., l.c.l., frt. alld lb. .23 - —
Sulfapyridine USP XV, powd., bots., tins kilo.15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo.16.53 -17.65
Sulfathiazole, NF X, powd. dms. kilo. 5.50 - 5.85
microcrystals, dms. kilo. 6.25 - 6.60
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. 2.35 - —
Sulfur, coml flour, bgs. mines, 100 lbs. 2.43 - —
bbls., mines 100 lbs. 3.30 - —
lump, bgs., mines 100 lbs. 2.35 - —
bbls., mines 100 lbs. 2.90 - —
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines long-ton.23.50 - —
Export, f.o.b. vessels Gulf ports long-ton.23.00 - —
US and Canada, f.o.b. vessels Gulf ports, long-ton.23.00 - —
Domestic dark sulfur prices are $1 per long-ton lower.
Sulfur, crude, bulk, imp., Mexican, filtered f.o.b. vessel, Coatzacoalcos long-ton.24.00 - —
Mexican dark sulfur price is $1 per long ton lower.
Sulfur, refd., flowers, NF, bgs., mines 100 lbs. 5.13 - —
bbls., mines 100 lbs. 6.50 - —
flour, light, bgs., mines 100 lbs. 4.75 - —
bbls., mines 100 lbs. 5.75 - —
lump, bgs., mines 100 lbs. 4.45 - —
rolls, bgs., mines 100 lbs. 5.00 - —
bbls., mines 100 lbs. 5.75 - —
salt block, bgs., mines 100 lbs. 4.65 - —
virgin block, bbls., mines, 100 lbs. 4.70 - —
Sulfur, rubbermakers coml., reg., bgs., mines 100 lbs. 2.53 - —
bbls., mines 100 lbs 3.80 - —
98-100%, passing through 325 mesh, bgs., mines 100 lbs. 2.05 - —
bbls. mines 100 lbs. 3.90 - —
refd., bgs., mines 100 lbs. 4.40 - —
bbls., mines 100 lbs. 5.55 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.85 - —
bbls., mines 100 lbs. 4.10 - —
Sulfur dichloride, ref. dms., c.l., works, frt. equald lb. .04½- —
ref. dms., l.c.l., same basis lb. .05¼- —
tanks, same basis lb. .04 - —
Sulfur dioxide, liq., coml., cyls., works, frt. equald lb. .10 - .12
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
Refrigeration, 150-lb. cyls., divd. lb. .33 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .04½- —
dms., l.c.l., same basis lb. .05¼- —
tanks, same basis lb. .04 - —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., l.c.l., works 100 lbs. 2.30 - —
tanks, works ton.18.60 - —
66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., l.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton.22.35 - —
93%, tanks, works ton.23.50 - —
99-100% tanks, works ton.23.95 - —
CP, NF, consumers' cbys., c.l., frt. equald lb. .12¾- —
consumers' cbys., l.c.l., same basis lb. .14½- .14¾
5-pt. bots. extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt. bots. extra, cs., l.c.l., same basis lb. .17¼- .18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works ton.25.00 - —
40%, tanks, works ton.29.00 - —
65%, tanks, works ton.39.50 - —
Sumac leaves, 25% tannin, bgs., ex dock ton.205.00 Nom.
28% tannin, grd., bgs., ex dock ton.200.00 Nom.
Superphosphate, run-of-pile, under 22% a.p.a., pulv., bulk., c.l., Baltimore unit-ton. .96 - .98
bulk, c.l., Carteret, N. J. unit-ton. .99 - .93
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla. unit-ton. .98 - —
Sweet birch oil, USP, northern, cns. lb. 4.00 - 9.50
USP, southern, cns. lb. 2.10 - 3.05

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2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
dms., l.c.l., same basis lb. 1.25 - —
2,4,5-T isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., l.c.l., works lb. 1.29 - —
Talc, dom. fibrous, New York, grd., bgs. c.l. works ton.28.00 - —
bgs. l.c.l. works ton.31.00 -36.00
Dom., fibrous, New York, 99.5% 325 mesh bgs c.l. works, ton.31.00 - —
bgs., l.c.l., works ton.34.00 - —
99.95% micronized, bgs. works ton.38.00 - —
ord., Calif., grad., bgs., c.l., works ton.34.00 -39.50
Vermont, off-color, grd., bgs., c.l., works ton.19.40 - —
bgs., l.c.l., works ton.37.90 - —
Imp., Canadian grd bgs. c.l., mines ton.20.00 -25.00
Tall oil, crude, dms. c.l., works lb. .04¼- .04½
tanks, works lb. .02¾- .03
Dist., dms. c.l., works lb. .07¾- —
dms., l.c.l., works lb. .08 - .08½
tanks, works lb. .06 - .06½
Refd., dms., c.l., works lb. .06¾- —
dms., l.c.l., works lb. .07 - .07½
tanks, works lb. .05½- .06
Tall oil acids, dms. c.l., works lb. .10½- .12
dms. l.c.l. lb. .11 - .12½
tanks, works lb. .08½- .10
Tall pitch, dms. c.l., works ton.50.00 -70.00
tanks, works ton.40.00 - —
Tallow, edible, tanks, divd. lb. .11 - —
inedible, fancy, bleachable, tanks, divd lb. .07⅞- —
fancy, guaranteed, dms., f.a.s. lb. .09¼- —
No. 1, tanks, divd. lb. .07 - —
prime, tanks, divd. lb. .07⅝- —
special, tanks, divd. lb. .07¾- —
sulfonated, 25%, bbls., l.c.l lb. .08¾- .09¼
50%, bbls., l.c.l lb. .10 - .10½
Tallow acids, dist., dms. lb. .13½- .16
tanks lb. .11 - —
Hydrogenated, dms. lb. .15½- .18
Tallow oil, acidless, dms. c.l. lb. .14½- —
dms. l.c.l lb. .15½- .17
Tangerine oil, Floridian, dms. lb. 2.95 - 3.50
Tankage, animal, feeding 9-11% ammonia New York, bulk. unit-ton. 6.75 - —
Animal, feeding, 9-11% ammonia Chicago, bulk unit-ton. 7.25 - —
Tannic acid, NF fluffy bbls 1,000-lb lots lb. 2.05 - —
bbls., smaller lots lb. 2.06 - 2.10
Powd., bbls., 1,000-lb. lots lb. 1.95 - —
bbls., smaller lots lb. 1.96 - 2.01
Tech., dms. lb. 1.05 - —
Tansy oil, dms. lb. 7.50 - 9.50
Tapioca flour, Brazilian, bgs., ex whse lb. .10½- .11¼
Siamese, first quality same basis, lb. .07 - .07¼
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .53½- —
dms., l.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
25-28%, dms., c.l., same basis gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms. c.l., same basis gal. .75 - —
dms., l.c.l., same basis gal. .77 - —
tanks, same basis gal. .65 - —
Tar, coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate)
Tartaric acid, dom., NF, 230 or 250-lb dms., c.l. lb. .49 - —
230 or 250-lb. dms., 10,000-lb. lots, 1 shipt lb. .49½- —
Tartaric acid, dom., NF, 230 or 250 lb. dms., smaller lots lb. .50 - —
100-lb dms. lb. .51 - —
Imp., NF, bgs., dms., kgs. lb. .40 - .44
Terpine hydrate, NF, cryst., powd., 100-lb fib. dms lb. .70 - —
Terpineol, extra, dms. lb. .41 - .70
Prime, dms lb. .39 - .45
Terpinyl acetate, extra, cns., dms. lb. .64 - .75
Prime, dms. lb. .53 - .56
Terpinyl propionate, dms. lb. 1.75 - 3.00
Terra alba (see Gypsum).
Testosterone, USP, bots. gram. No prices
Testosterone proprionate, USP gram. No prices
Tetrachloroethane, dms., works lb. .14½- —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech. (see Perchloroethylene).
Tetrachloroethylene USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms., l.c.l., works lb. .22 - .23½
Tetraethyl orthosilicate, dms., c.l., divd. E. lb. .60 - —
dms., l.c.l., divd. E lb. .61 - —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetrachlorethylenepentamine, dms., c.l., divd. E. lb. .53½- —
dms., l.c.l., divd. E lb. .54½- —
tanks, divd. E lb. .51 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .26½- —
dms., l.c.l., or t.t.l., works lb. .27 - —
tanks, works lb. .25 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .24½- —
dms., l.c.l., t.t.l., Memphis, Tenn. lb. .25½- —
dms., c.l., t.l., Newark, N. J. lb. .26½- —
dms., l.c.l., t.t.l., Newark, N. J. lb. .27½- —
tanks, divd. E of Denver lb. .24 - —
tanks, divd. W. of Denver lb. .25 - —
Tetrapotassium phosphate (see Potassium phosphate).
Thallium metal, divd. lb. 7.50 -10.00
Thallium sulfate, 99%, bots., divd. lb. 5.00 -10.00
Theobromine, NF, fib. dms. lb. 4.50 - —
Theobromine and sodium acetate, USP, fib. dms lb. 4.75 - —
Theobromine sodio-salicylate, NF, fib. dms. lb. 3.90 - —
Theophylline, anhyd., or USP, 100-lb. dms lb. 3.85 - —
Thiamin hydrochloride, USP, reg., fib. dms kilo.40.00 - —
USP, ampule grade, fib. dms.kilo.42.00 - —
Thiamin mononitrate, USP, fib. dms kilo.40.00 - —
Thiocarbanilide, dms., ton lots lb. .72 - —
dms., less ton lots lb. .74 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb. 5.20 - —
Tungstated, PTMA, kgs., works, lb. 6.20 - —

Thioglycolic acid, refd. cbys., 100% basis lb. 1.35 - 1.55
Thiosalicylic acid, purif., dms., 1,000-lb. lots, works lb. 4.00 - —
Thiourea, tech. bgs. t.l. frt. alld. lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis. lb. .33 - —
Thorium nitrate, purif. fib dms., 100-lb. lots or more, works lb 3.50 - —
dl-Threonine, bots., 1-kilo lots kilo. 275.00 - —
Thyme leaves, French, bgs lb. .34 - —
Spanish, bgs. lb. .14 - —
Thyme oil, NF, red, cns., dms lb. 2.00 - 2.25
white, cns. lb. 2.20 - 2.60
Tech. white cns lb 40 - 1.85
Thymol, fib dms lb 2.60 3.00
Thymol iodide NF dms lb. 7.30 - —
Timbo root, (see Cube root).
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. .94⅜- —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate)
Tin tetrachloride anhyd. (see Stannic chloride anhyd.)
Titanium dioxide anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd lb. .26½- —
reg., bgs., c.l., dlvd lb. .25½- —
bgs. l.c.l., dlvd lb. .26½- —
Titanium dioxide, anatase, metallurgical, nat., bgs., c.l., f.o.b. Jacksonville, Fla. ton. 180.00 - —
5-ton lots, Niagara Falls, N.Y. ton. 205.00 - —
bgs. ton lots same basis. ton. 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher
Titanium dioxide, rutile, non-chalking, bgs., c.l., dlvd. E lb. .27½- —
bgs., c.l. dlvd E lb. 28½- —
Titanium dioxide-calcium pigment, 30% Ti O2, reg. bgs., c.l., dlvd lb. .09⅜- —
bgs., l.c.l., works lb. .09⅜- —
50% Ti O2, high-tinting, dms. c.l., lb. .14⅜- —
dms., l.c.l. lb. .14⅜- —
Titanium hydride, powd., dms., works lb. 8.10 - 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. .20 - —
Tobias acid, bbls., l.c.l. lb. .81 - —
d-a-Tocopherols, mixed, NF, conc. pure basis, bots kilo. 91.00 - —
dl-a-Tocopherol, bots kilo. 134.20 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 166.00 - —
d-a-Tocopheryl acid succinate, cryst. bots kilo. 148.00 - —
dl-a-Tocopheryl acetate, bots kilo 122.00 —
25% dry, powd., bots kilo. 30.50 -32.00
33⅓ dry powd., bots kilo. 40.63 -42.50
o-Tolidine base, dry kgs., 100% basis lb. 1.50 - —
Paste, kgs., 100% basis lb. 1.43 - —

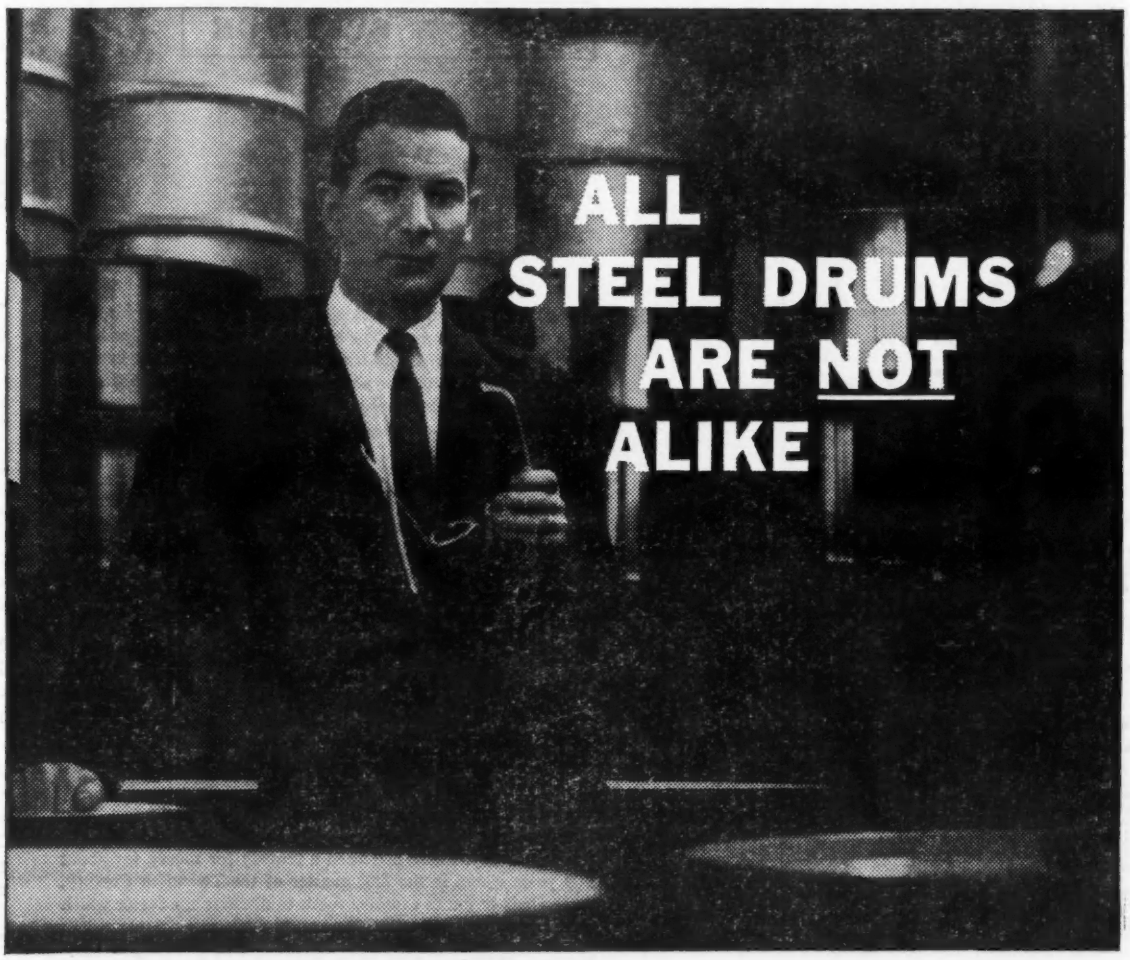
Toluol

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride, paste, kgs., 100% basis lb. 1.45 - —
Tolu balsam cns. lb. 3.10 - 4.35
Toluene, coaltar, indust. or nitration, tanks, dlvd. E. of Rockies gal. .25 - —
Toluene, petroleum, indust., tanks, E. of Rockies gal. .25 - .32
p-Toluenesulfonamide, powd., dms., works lb. .70 - —
p-Toluenesulfonic acid, dms., c.l., t.l., works lb. .17 - —
dms., l.c.l., works lb. .18 - —
p-Toluenesulfonic acid, mononydrate, dms., c.l., or t.l lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .79 - —
dms., l.c.l., same basis lb. .80 - —
tanks, same basis lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .27 - —
dms., l.c.l., same basis lb. .28 - —
tanks, same basis lb. .25 - —
p-Toluidine, flake, dms., frt. alld lb. .54 - —
Solid, dms., frt. alld lb. .50 - —
p-Toluidine-m-sulfonic acid, bbls., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs., works lb 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld lb. 1.10 - —
Tonka beans, Angostura, cks lb. No prices.
Brazilian, Surinam, cs lb. 1.35 - —
Totaquine 100-oz. lots, cns. oz. .42 - —
Toxaphene, dms., c.l., t.l., works lb. .22 - —
dms l.c.l. t.l.l. works lb. .25 - —
Tragacanth gum, No. 1, ribbons, cs lb. 3.50 - 4.50
No. 2, cs. lb. 3.40 - —
No. 3, cs. lb. 3.00 - 3.10
USP, powd., bbls. lb. 1.25 - 1.38
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 - —
dms., l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Triallylamine, dms., c.l., dlvd. lb. .985 - —
dms., l.c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .90 - —
Tributyl citrate, tech., non-ret, dms., c.l., frt. alld. E. of Denver lb. .42⅛- —
non-ret, dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt. alld. E. of Denver lb. .40 - —
Tributyl phosphate, dms. c.l., works lb. .32½- —
dms., l.c.l., same basis lb. .33½- —
tanks, same basis lb. .30 - —
Tributylamine, dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .68½- —
tanks, same basis lb. .65 - —
Trichloroacetic acid, bots lb. 2.00 - 2.50
Trichlorobenzene, dms., c.l., frt. alld. E. lb. .15 - —
dms., l.c.l. frt. alld E. lb. .16 - —
tanks, frt. alld E lb. .13¼- —
Trichlorobenzene prices in the West 1¼c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¾- —
dms., l.c.l., dlvd. lb. .16¾- —
tanks, dlvd. lb. .12¾- —
1,1,2-Trichloroethane, dms., c.l., works lb. .13¼- —
dms., l.c.l., dlvd. E. lb. .14¼- —
tanks, works lb. .11¼- —
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .13 - —
dms., l.c.l., frt. alld lb. .15 - .16¼
tanks, works, frt. equald lb. .13 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate 65% soln. ret. cbys. works, frt. adjusted lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. lb. .36 - —
tanks, dlvd lb. .32½- —
Petroleum, dms., c.l., dlvd. lb. .34½- —
dms., l.c.l., dlvd. lb. .35½- —
tanks, dlvd. lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., dlvd. lb. .28½- —
dms., l.c.l., dlvd lb. .27½- —
Triethanolamine, dms., c.l., dlvd. E. lb. .24½- —
dms., l.c.l., same basis lb. .25½- —
tanks, same basis lb. .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l. frt. alld lb. .24 - —
dms., l.t.l., frt. alld lb. .23 - —
tanks, frt. alld lb. .23 - —
Triethylamine, dms. c.l., works, dlvd. E lb. .50 - —
l.c.l., same basis lb. .51 - —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms. c.l., frt. alld E. of Denver lb. .46¼- —
non-ret. dms. l.c.l. frt. alld. E. of Denver lb. .47¼- —
tanks, frt. alld E of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd lb. .40½- —
dms., l.c.l., dlvd. lb. .41½- —
tanks, dlvd. lb. .38 - —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22 - —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., l.c.l., dlvd E. lb. .52½- —
tanks, dlvd. E. lb. .49 - —
Tri-Isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., l.c.l., dlvd E lb. .24¼- —
tanks, dlvd. E. lb. .20¾- —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 - .305
tanks, same basis lb. .26 - —
25-40% soln., dms., c.l., works, frt. equald, 100% basis lb. .33 - —
dms., l.c.l., works, frt. equald., 100% basis lb. .35½- —
tanks, works, frt. equald, 100% basis lb. .26 - —
Trioxane, pure dms. c.l. t.l. works. lb. .50 - —
dms. l.c.l., works lb. .51½- —
Tripentaerythritol, c.l., t.l., dlvd. E. lb. .38 - —
bgs., l.c.l., l.t.l., dlvd. E. lb. .39 - —
Triphenyl phosphate bbls., c.l., frt. equald lb. .41½- —
bbls., l.c.l., frt. equald lb. .43½- —
Triphenylguanidine bbls. works lb. .90 - —
tanks, same basis lb. .18½- —
Tripropylene glycol dms., c.l., t.l., frt alld E lb. .21 - —
dms., l.c.l., t.l.l. frt. alld E lb. .22 - —
Tripropylene glycol, tankcars and compartmented tankcars, frt. alld. E lb. .18½- —
tankwagons and compartmented tankwagons, 1,000 gals. min. frt. alld E lb. .19 - —
Tripropylene glycol prices 1c. per lb. higher in West
Trisodium phosphate (see Sodium phosphate tribasic)
dl-Tryptophane, fib. dms., works. lb. 5.50 - —
Tung oil, dms., c.l., New York lb. .22½- —
dms., l.c.l., New York lb. .22¾- .23¼
tanks, New York lb. .21 - —
tanks, domestic mills lb. .21¼ Nom.
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 3.73 —
Tungstic acid tech dms 1,000-lb lots, works lb 2.15 Nom.
dms., smaller lots, works lb. 2.30 Nom.
Turkey red bbls. works lb. .62 —
Turpentine, gum (see Protective Coatings market Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 .50
Tyrothricin USP bots gram. .55 .59
Tuscan red, bbls. frt. equald lb. .26 .32

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .35 - .39¼
Ultramarine blue, jobbing types, bbls., same basis lb. .19 - —
Regular types, dry bbls., same basis lb. .22½- .35
Ultramarine blue prices 1c. higher W. of Rockies.



Now protect product purity, hold down costs two ways with these U. S. Steel rust-inhibited drums

U. S. Steel rust-inhibited drums give maximum protection because they are made with extra care. Every head, shell and bottom is precisely formed, chemically cleaned, then coated inside and out with zinc phosphate — all before final forming.

And to each of these rugged, durable drums—and pails, too—U. S. Steel tacks on two extra purchasing advantages:

1. Today's widest variety of carbon steel shipping containers is offered by U. S. Steel. Capacities from 2½ through 57 gallons, plus a full line of stainless-steel pails and drums.

Special linings and closures are supplied to your specification. Unsurpassed color-decorating facilities are available—all to assure you of a container best suited to your needs.

2. Seven U. S. Steel container factories, located in key areas, form a nationwide network. You can take deliveries by rail or truck, set up arrivals to coincide with your production schedule. You minimize handling and inventory problems, get on-time deliveries.

We urge you to talk over your requirements with your U. S. Steel representative. He puts at your disposal over 40 years' experience with all types of shipping-container problems.

Factories in: Los Angeles, Calif. • Alameda, Calif. • Port Arthur, Texas • Chicago, Ill. • New Orleans, La. • Sharon, Pa. • Camden, N. J.

HOW U. S. STEEL GIVES "LOCAL" SERVICE.

U. S. Steel has spotted its container plants in seven key areas to give you better service. In addition, there are sales offices in many other cities. Wherever you are, there is a convenient USS representative or factory ready to serve you.

United States Steel Products Division

USS TRADEMARK

Umber pigment, burnt, American, bgs., c.l., works	lb.	.07½	-	.07¾
bgs., l.c.l., works	lb.	.07¾	-	.08
Burnt, Turkey-type, ogs., c.l. Boston Bethlehem, Easton, Pa., Hiwassee, Va., N Y.	lb.	.08¼	-	—
Raw, American bgs. works	lb.	.07¾	-	.08¼
Turkey-type, bgs., works	lb.	.08½	-	.08¾
Undecylenic acid, dms	lb.	1.45	•	—
Unicorn root, false (see Helonias root)				
Unicorn root, true (see Aletris root).				
Urea 46% N indust. bgs., c.l. t.l. dlvd E	ton	125.00	•	—
bgs. l.c.l. dlvd E. ex whse	ton.	145.00	•	—
45% N agricultural, bgs., c.l. (30 tons) dlvd E	ton.	110.00	•	—
Urea-ammonia liquor A and B grades N basis, tanks, Belle W Va	ton	126.00	•	—
C grade, tanks, same basis	ton	124.50	•	—
37 grade tanks same basis	ton	153.00	•	—
Urethane USP dms t.l., f.o.b. works	lb	.65	•	—
dms., l.t.l., same basis	lb.	.70	•	—
Uva-ursi leaves, bls	lb.	.17	•	.19

V

Valerian root, Belgian, bgs	lb	.35	•	—
Indian bgs	lb	.29	•	—
dl-Valine, dms., works	lb.	21.00	•	27.50
Valonia beards, 40-42% tannin, bgs. ex dock	ton.	88.00	•	90.00
Valonia cups, 28-30% tannin, bgs. ex dock	ton.	66.00	•	67.00
Valonia extract, powd. 63% tannin, bgs. ex dock	lb.	.11	•	—
Vanadium pentoxide, tech dms., works	lb	1.28		1.33
Vandyke brown, bbls, works	lb	09½		12
Vanilla beans, Bourbon, tins	lb.	10.60	•	10.80
Mexican, cuts, tins	lb.	10.60	•	10.80
whole, tins	lb.	10.50	•	10.70
Tahiti, cs.	lb.	8.10	•	8.25
Vanillin, ex lignin, 100-lb. fib. dms., 1,000-lb. lots or more	lb.	3.00	•	—
100-lb. fib. dms., 500-lb. lots	lb.	3.10	•	—
100-lb. fib. dms., 100-lb. lots	lb.	3.25	•	—
Venetian red, jobbing, bgs., works.	lb.	0475	-	—
20%, bgs., works	lb.	.0525	-	—
25%, bgs., works	lb.	.0575	-	—
30%, bgs., works	lb.	.06	-	—
35%, bgs., works	lb.	.0625	-	—
40%, bgs. works	lb	0575	-	—
Vetiver oil, Bourbon, cns	lb.	11.25	-	15.50
Haitian, cs.	lb.	10.50	-	12.50
Java, cns	lb.	11.75	-	12.25
Victoria blue toner, molybdated, PMA, 250-lb. bbls., dlvd. E. of Rockies	lb.	4.50	•	—
Victoria blue toner bbls. prices 1c. higher W. of Rockies.				
Vinyl acetate monomer, zana 1, 55-gal. dms., c.l., dlvd	lb	.20	•	—
55-gal. dms., l.c.l., dlvd	lb.	.21	•	—
tanks, dlvd	lb.	.17½	-	—
tanktrucks less than 4,000 gal., dlvd	lb.	.18	•	—
Zone 2, 55-gal. dms., c.l., dlvd	lb.	.21	•	—
55-gal. dms., l.c.l., dlvd	lb.	.24	•	—
tanks, dlvd	lb.	.18½	-	—
tanktrucks less than 4,000 gals., dlvd	lb.	.19	•	—
Zone 1 is all continental U. S. except Zone 2. Zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.				
Vinyl n-butyl ether, tech., dms., l.c.l., works	lb.	.50	•	—
Vinyl chloride monomer, tanks, works	lb.	.11	•	.125
Vinyl ether, tech. dms., c.l., works.	lb.	.26	•	—
dms., l.c.l., works	lb.	.28	•	—
tanks, works	lb.	.25	•	—
Vinyl ether, USP, anesthesia, bots., 50cc. hospitals	bot.	1.12	•	—
bots., 75cc, hospitals	bot.	1.56	•	—
Vinyl ethyl ether, tech., dms., c.l., works	lb.	.29¼	-	—
dms., l.c.l., works	lb.	.30	•	—
tanks, works	lb.	.27¼	-	—
Vinyl methyl ether cyls, works	lb	.30		—
Cylinders are sold outright, or if shipped against deposit, a free period of sixty days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made.				
Vinyl propionate, monomer dms., c.l., dlvd	lb.	.49½	-	—
dms., l.c.l., same basis	lb.	.50½	-	—
tanks, same basis	lb	.47	•	—
Vinyl trichloride (see Trichloroethane).				
2-Vinylpyridine, tl dms to tanks, works	lb.	1.30	•	—
1 to 9 dms., works	lb.	1.45	•	—
tanks, works	lb.	1.25	•	—
Vinyltoluene, dms., c.l., f.o.b., works.	lb.	.16	•	—
dms., l.c.l., same basis	lb.	.18	•	—
tanks, same basis	lb.	.13½	-	—
Viosterol, in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units.		.02½	-	—
Virginia type red, bbls., works	lb	1.40	•	—
Vitamin A acetate syn., cryst., beads, 500,000 A units per gram gram.		.07¼	-	—
dry, 500,000 units per gram, kilo lots	kilo.	67.50	•	—
325,000 units per gram, same basis	kilo.	43.88	•	—
250,000 units per gram, same basis	kilo.	33.75	•	—
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.				
Vitamin A, liq in oil, 1,000,000 A units per gram 1,000,000 units.		.10	•	—
Vitamin A, palmitate, liq. 1,000,000-1,800,000 A units per gram 1,000,000 units.		.10	•	—
Liq. in oil, 1,000,000 A units per gram 1,000,000 units.		.10	•	—
Vitamin B_1 (see Thiamine hydrochloride).				
Vitamin B_2 (see Riboflavin and Yeast).				
Vitamin B_{12}, cryst., 1-50 grams, vials, tins	gram.	190.00	•	—
Oral grade solids, in containers of 1 and 10 grams of B_{12} activity	gram.	100.00	•	—
0.1 percent triturations of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10	kilo.	218.00	•	—
Vitamin C (see Ascorbic acid)				
Vitamin D (see Codliver and Fish-liver oils, Calciferol and Viosterol).				
Vitamin D_2, dry, 850,000 units per gram kilo lots	kilo.	42.50	•	—
850,000 units per gram less than kilo lots	kilo.	45.00	•	—
Vitamin E (see a-Tocopherol and Wheat germ oil)				
Vitamin G (see Riboflavin)				
Vitamin H (see Biotin)				
Vitamin K, active (see Menadione).				
Vitamin K_1, 25 gram lots	gram.	4.50	•	—
Violet methyl toner (see Methyl violet toner).				
VM&P naphtha (see Naphtha, VM&P, petroleum).				

W

Wahoo root, bark, bls	lb.	2.10	•	—
Warfarin, 0.5%, dms., 50-lb. lots, dlvd	lb	1.95	•	—
dms, 25-49-lb lots, New York or Chicago	lb.	2.05	•	—
Warfarin, 0.5%, cns., 5-24-lb. lots New York or Chicago	lb.	2.15	•	—
Watchung-type reds, bbls	lb	1.95	•	—
Wattle bark, fair average, African, bls, ex dock	ton.	68.00	•	—
Merchantable, bls., ex dock	ton.	64.00	•	—
Wattle extract, liq., 35% tannin, bbls.	lb.	.08¼	-	.08½
Solid, East Africa, 60% tannin, bgs., ex dock	lb.	.08275	-	—
South Africa, 60% tannin, bgs., ex dock—lb.		.0840	-	—
Wheat germ oil, 5-gal. dms	gal.	12.25	•	—
Wheat starch (see Starch, wheat).				
White lead (see Lead, white)				
White mineral oil (see Mineral oil, white).				
White pine bark, rossed, bls	lb.	.18	•	.19
White precipitate, USP powd. dms.,	lb.	6.55	•	—
Whiting (see Calcium carbonate)				
Wild cherry bark, thin nat., bls	lb.	.18	•	—
Thin, rossed, bls.	lb.	.21	•	—
Wintergreen oil USP nat. northern, cns	lb.	6.35	-	17.50
USP, nat., southern, cns	lb.	3.75	-	7.00
Wintergreen oil, syn (see Methyl salicylate).				
Witch hazel bark, bls	lb.	.16	•	.17
Witch hazel leaves, bls	lb.	.22	•	—
Wollastonite, fine, bgs., c.l., works.	ton.	39.50	•	—
bgs., l.c.l., ex whse	ton.	56.00	•	—
Medium, bgs. c.l., works	ton.	27.00	•	—
bgs., l.c.l., ex whse	ton.	44.00	•	—
Wood alcohol (see MethanoD.				
Wood oil (see Tung oil)				
Woolfat, crude (see Degras).				
Woolfat, USP (see Lanolin).				
Wormseed, Levant, bas	lb.	4.25	•	4.50
Wormseed oil (see Chenopodium oil, NF).				
Wormwood oil, cns.	lb.	4.90	•	5.85

Waxes

Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

X

Xylene, coaltar, indust., tanks, works: Bethlehem, Pa.	gal.	.29	•	—
Birmingham dist.	gal.	.29	•	—
Chicago dist.	gal.	.29	•	—
Cleveland dist.	gal.	.29	•	—
Geneva, Utah	gal.	.29	•	—
Johnstown, Pa.	gal.	.29	•	—
Lackawanna, N. Y.	gal.	.29½	-	—
Lone Star, Tex.	gal.	.27	•	—
Xylene, coaltar, indust., tanks, works: Lorain, Ohio	gal.	.29	•	—
Middletown, Ohio	gal.	.30	•	—
Philadelphia dist.	gal.	.29	•	—
Pittsburgh dist.	gal.	.29	•	—
Sparrows Point, Md.	gal.	.29	•	—
Terre Haute, Ind.	gal.	.29	•	—
Youngstown, Ohio	gal.	.29	•	—
Xylene, petroleum indust., tanks, f.o.b. works: Bayonne, N. J.	gal.	.29	•	—
Baytown, Tex	gal.	.27	•	—
Charleston, S. C.	gal.	.29	•	—
Chicago, Ill.	gal.	.30	•	—
Houston, Tex.	gal.	.27	•	—
Philadelphia, Pa.	gal.	.29	•	—
Providence, R. I.	gal.	.30	•	—
Sewell's Point, Va.	gal.	.28	•	—
Wood River, Ill.	gal.	.29	•	—
Xylenol, cryst., 45°-47° C., m.p., dms., l.c.l., works	lb.	.23	•	—
56°-58°C. m.p., dms., l.c.l., works, frt. equald	lb.	.33	•	—
60°-62°C. m.p. dms., l.c.l., same basis	lb.	.40	•	—
Xylenol fraction, b.r. 7°-9°C., dry above 227°C., dms., c.l., same basis	gal.	1.25	•	—
dms., l.c.l., same basis	gal.	1.30	•	—
tanks, same basis	gal.	1.05	•	—

INSIDE SCIENCE

The Vital Story

A Puzzling Medical Case. A sick, fretful baby lay on his back in a hospital crib recently, his legs extended and his knees slightly bent. He cried and tried to draw away from the examining physician. The doctor studied the case carefully, noting the symptoms and investigating the history of the little patient. Then he made his diagnosis. The baby had *scurvy*.

An Ancient Disease. To us scurvy is a remote disease. We know that years ago it attacked sailors and explorers living on monotonous diets of salt meat and hardtack. But it's hard to believe that scurvy occurs even today in the United States. To be sure, there are few cases, but there should be none! Scurvy is a disease resulting from a deficiency in the diet; it is simply the lack of enough vitamin C.

Scurvy was a disease of the Crusades. It traveled with Vasco de Gama around the Cape of Good Hope, killing two-thirds of his crew. It struck down a quarter of Cartier's men wintering in Canada in 1535. It occurred in famines and pestilences.

Vitamin C Isolated. Long before vitamin C was known, man found certain fruits and vegetables helpful in preventing and treating scurvy. These had been a remedy for scurvy for about 300 years when, in the first quarter of the Twentieth Century, researchers began to examine foods to discover the factor which made them antiscorbutic.

Between 1918 and 1925, Zilva concentrated this antiscorbutic substance from lemons and Agopian isolated it in cabbage.

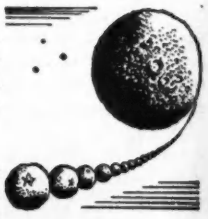
Zilva's work established the important properties of the vitamin, its molecular construction, and its activity as a "reducing factor" — its ability to absorb oxygen. In 1928 Szent-Györgyi, after eight years of investigation, isolated a strong reducing compound from adrenal glands, oranges and cabbage, which he called "hexuronic acid."

In 1931 C. G. King established the chemical structure of vitamin C, thus opening the way to new and important findings. The following year various investigators identified the "reducing factor," "hexuronic acid" and vitamin C as the same compound.

Nature's Vitamin Duplicated. Soon after the vitamin had been isolated and its chemical structure understood, it was synthesized by Reichstein and his fellow workers in Switzerland. Almost simultaneously in Great Britain, Haworth and his associates achieved the same results. The year was 1933.

The synthesis of vitamin C led to pilot plant and then to commercial production, making it available at lower costs than if it had been extracted from natural sources. In fact, the Reichstein synthesis is the basis for weekly production *by the tons* by the firm of Hoffmann-La Roche, the world's largest producer of vitamin C. This commercial production of vitamin C has had incalculable value to the health of people all over the world.

To The Moon And Back. In the United States today, the average *weekly* production of man-made vitamin C now approaches 40 tons — the amount contained in approximately three-quarters of a billion average oranges.



A graphic way to illustrate the huge annual production is to show the equivalent in oranges. Laid side by side, these oranges would reach over two million miles, or more than four round trips to the moon. The *weekly* production alone, expressed as oranges, would circle the world at the equator over one and one-half times.

Synthesis on such a gigantic scale has led to economical costs. Because of this and its proven value to health, vitamin C has an increasingly widespread use in food and pharmaceutical products. There is no substitute for Vitamin C!

A Little Goes A Long Way. One kilogram (2.2 pounds) of pure vitamin C will supply 13,333 people for one day with the amount recommended (75 milligrams) for daily intake by the National Research Council. Or it will supply 92 people for one year with the adult Minimum Daily Requirement (30 milligrams) set by the U. S. Food and Drug Administration.

Names. The designation, vitamin C, is used interchangeably with ascorbic acid. "Ascorbic" is a relatively new word in our language. It was devised by Szent-Györgyi and Haworth in 1933 from antiscorbutic.

Among chemists and nutritionists, vitamin C is known as *l*-ascorbic acid. The formula is $C_6H_8O_6$, which means that it is composed of carbon, hydrogen, and oxygen.

Physical Characteristics. *l*-Ascorbic acid is a white crystalline compound with a slightly acidic taste. It is readily soluble in water, alcohol, glycerin and propylene glycol, and insoluble in oils, fats, ether, benzene or chloroform.

Since it is able to "attach" itself to oxygen it is one of our most important antioxidants for certain foods that have a tendency to discolor and lose their natural flavor.

The designation "U. S. P." used with *l*-ascorbic acid indicates that the product conforms to the stringent specifications of the United States Pharmacopeia. These initials stand for top quality.

Vitamin C made by the Roche process is chemically and biologically identical with nature's own product.

How Vitamin C Helps Our Health. Vitamin C is a vital substance; we cannot live without it. Not only does it prevent or cure scurvy, but it is essential for maintaining healthy bone tissue, and for forming collagen, an important protein found in our skin, tendons, bones, cartilage and connective tissue. Vitamin C is needed for the healthy functioning of the vessels

Xylenol fraction, b.r. 7-9°C., dry at or below 227°C., dms., c.l., same basis	gal.	1.35	—
dms., l.c.l., same basis	gal.	1.40	—
tanks same basis	gal.	1.15	—
Xylidines, mixed o-m-p, dms. c.l. or t.l., works	lb.	38	—
dms., l.c.l., same basis	lb	40	—
tanks same basis	lb	38	—

Xylol

Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, ens.	lb.	2.15	3.05
Yeast brewers, debittered, USP Saccharomyces dlvd	lb.	27	—
Dry, USP, 50 int'l B units per gram 100-lb dms	lb.	47	—
90 int'l B units per gram, 100-lb. dms	lb.	.52	—
200 int'l B units per gram, 100-lb. dms.,	lb.	.56	—
300 int'l B units per gram 100-lb dms	lb	60	—
Torula USP dlvd	lb	18	—
Yerba santa leaves bls.	lb	40	43
Ylang-ylang oil, Bourbon bots	lb	19.00	25.00

Yellow Pigments

Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Ylang-ylang oil, Bourbon, extra, bots	lb.	28.00	40.00
Madagascar, bots	lb	No Stocks	
Yohimbine hydrochloride bots, tins	oz.	4.75	5.25

Z

Zein bgs. 36,000 lb lots or more f.o.b. plant	lb.	.28	—
bgs., 500-lb. lots or more, dlvd.	lb.	.343	—
bgs., smaller lots, dlvd	lb.	.373	—
Zinc acetate NF VIII dms	lb	53	—
Tech., dms., l.c.l., works	lb.	.29¼	—
Zinc borate, bgs., 1,000 lbs. or more, works	lb.	.23	—
bgs. less than 1,000 lbs., same basis	lb.	.25	—
Zinc chloride, NF gran. dms	lb	42	—
Precip., powd., dms	lb.	.26	—
Soln., 50% dms. c.l. works 100 lbs		5.80	—
dms., t.c.l., works 100 lbs		6.40	—
tanks, works 100 lbs		5.15	—
Zinc chloride, tech, fused, dms., c.l., works 100 lbs.		10.70	—
dms. t.c.l., works 100 lbs.		11.20	—
gran., fib. dms., c.l. works 100 lbs.		11.45	—
fib dms. t.c.l. works 100 lbs.		11.95	—
Zinc chromate bbls., dlvd.	lb.	.29	—
Basic, bbls. dlvd	lb.	.34	—
Zinc cyanide dms 1,000-lb. lots or more works	lb.	.55	—
dms. smaller lots works	lb.	.57	—
Zinc dust, comi., bbls. c.l. works	lb.	.1360	—
Pigment, bbls., c.l., works	lb.	.14	—
bbls., l.c.l., works	lb.	.15	—
Zinc fluoride bbls. works	lb.	.49	.50
Zinc hydrosulfite, dms. c.l., frt. alld	lb.	.21½	—
dms. t.c.l. frt. alld	lb.	.23½	—
Zinc metal, prime western slabs, E. St. Louis	lb.	.10	—
Prime western slabs, New York.	lb.	.10½	—
Zinc naphthenate liq. 8% Zn., dms., frt. alld	lb.	.27	—
10% Zn. dms., frt. alld	lb.	.33	—
Zinc nitrate tech., cryst., bbls., works	lb.	.20	—
Zinc oxide pigment, American process, lead-free bgs. c.l., frt. alld	lb.	.14½	—
bgs. t.c.l., same basis	lb.	.15½	—
Zinc oxide pigment, American process, leaded 35% bgs. c.l., mills, frt. alld	lb.	.15½	—
bgs., l.c.l., same basis	lb.	.16½	—
50%, bgs., c.l., same basis	lb.	.15¾	—
bgs., l.c.l., same basis	lb.	.16¾	—
Zinc oxide pigment, French process, green seal, bgs. c.l., mills, frt. alld	lb.	.16¼	—
bgs., l.c.l., same basis	lb.	.17¼	—
red seal bgs. c.l. same basis,	lb.	.15¼	—
bgs. l.c.l. same basis	lb	16¼	—
white seal, bgs., c.l., same basis	lb.	.16¾	—
bgs., l.c.l., same basis	lb.	.17¾	—
USP etns. c.l. frt alld	lb.	17¼	—
etns. l.c.l. same basis	lb.	18¼	—
Zinc oxide Pac Coast prices 1c higher.			
Zinc phenolsulfonate, NF gran., dms	lb.	.44	.45
NF, powd., dms.	lb.	.47	.48
Zinc resinate precip 7.2-7.6% Zn., dms. frt. alld	lb.	.36¼	—
Zinc silicofluoride dms., works	lb.	.12½	.14
Zinc stearate, tech. USP etns. c.l.,	lb.	.41	—
Zinc sulfate, powd., monohydrate, etns. t.c.l	lb.	.42	.48
36% Zn., bgs. c.l., dlvd. E 100 lbs		8.75	—
bgs. t.c.l. dlvd E 100 lbs		9.75	—
USP, gran. dms.,	lb.	.26	—
Zinc sulfate in bbls. 40c. higher.			
Zinc sulfide pure, bgs. c.l dlvd	lb	.2530	—
Zinc undecylenate, dms.	lb	2.00	—
Zinc yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works 100 lbs.		10.25	—
bbls. c.l., works 100 lbs.		10.85	—
bbls. t.c.l. works 100 lbs.		11.35	—
Zinc-formaldehyde sulfoxylate basic, dms., c.l.	lb.	.25½	—
dms. t.c.l	lb.	.26	—
Zircon (G), gran. bgs. c.l. works,	lb.	.03½	—
bgs., 5 tons to c.l., works	lb.	.03¾	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04	—
bgs. smaller lots works	lb.	.04½	—
Milled, bgs., c.l., works	lb.	.04½	—
bgs. 5 tons to c.l. works	lb.	.04¾	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04¾	—
bgs., 500-1,999-lb. lots works	lb.	.07½	—
Zircon (G) in barrels 1c higher			
Zirconium acetate, 13% soln., ZrO_2, c.l., 30,000 lbs minimum, works	lb.	.23	—
Zirconium hydride powd., dms., works	lb.	7.25	9.00
Zirconium oxide, CP, white, grd., bbls or bgs., works	lb.	1.50	—
Electric-fused, lump, bgs., 500 to 1,999-lb. lots, works	lb.	.45½	—
bgs. smaller lots works	lb.	.48	—
milled, bgs., c.l., works	lb.	.59	—
ogs. 5-ton lots, works	lb.	.59½	—
bgs., 1-ton to 9,999-lb. lots, works	lb.	.60	—
bgs., 500 to 1,999-lb. lots, works	lb.	.60½	—
bgs., smaller lots, works	lb.	.63	—
Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55	.62
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.37	.50
Stabilized oxide, 91% ZrO_2, rallied, bgs	lb.	.63	.85
Zirconium oxychloride, cryst., ens., 5-ton lots, works	lb.	.35½	—

Army Narrows Down

—Continued from page 4

deposited in leather prevented mildew growth.

These compounds are not readily volatilizable and are comparatively insoluble in water at room temperature. According to preliminary findings by the Office of the Surgeon General of the Army, leathers treated with as much as 1.20 percent of the bis compounds were not irritating to human skin.

Their effectiveness as leather fungicides is in contrast to the general inertness of similar compounds lacking a free phenolic OH group.

By an available analytical method, it was possible to establish the presence of 4-nitrophenol and 2-chloro-4-nitrophenol in leather that had been treated with the bis compounds and exposed to warm and humid conditions.

Apparently the effectiveness of the bis compounds is a consequence of their hydrolysis to nitrophenols. In the carbonate forms these compounds are probably inactive; such inactivity is evident in similar structures lacking a free hydroxyl group, the research indicates.

Because the bis compounds are presumably less toxic to human skin than the phenols, their concentration in the leather would not have to be carefully controlled. Their hydrolysis to phenols is facilitated by conditions favorable to mildew growth, and conceivably takes place only under those conditions.

Stability characteristics of the bis compounds must be studied before their usefulness can be established. Tests are being made to ascertain whether they decompose appreciably in the vehicle used for their deposition in leather. In organic solvents such as chloroform, little if any decomposition occurs, it was explained.

However, in tannery applications organic solvents may not be feasible. Also, their rate of hydrolysis in leather under warm and humid conditions must be determined. Ideally, they should hydrolyze so slowly that the amount of phenols liberated would be equal to that lost by leaching under the same conditions. Consideration must also be given to their cost and availability.

Expanded Version

# of VITAMIN C *by* Science Writer

(*l*-Ascorbic Acid)

through which our body fluids flow. It also promotes healing of wounds and fractures. It is believed to be essential for tissue respiration, the continual action of the cells as they burn food materials to provide heat and energy for the body.

Our Daily Requirements. Even though ascorbic acid is found in all body tissues and fluids, it will be rapidly exhausted if we do not replenish our supplies each day.

The Food and Drug Administration of the U. S. Department of Health, Education and Welfare has established a *Minimum Daily Requirement* for adults of 30 milligrams. This is just enough to prevent recognizable signs of vitamin C deficiency.

The Food and Nutrition Board of the National Research Council has issued *Recommended Daily Dietary Allowances* for vitamin C which are well above the F. & D. A. minimum.

Recommendations for Daily Vitamin C Intake
Ascorbic Acid (milligrams)

Men, all ages	75	Children, age 4-6	50
Women, all ages	70	Children, age 7-9	60
Women, pregnant (3rd trimester)	100	Children, age 10-12	75
Women, lactating	150	Boys, age 13-15	90
Infants, to one year	30	Boys, age 16-19	100
Children, age 1-3	35	Girls, age 13-15	80
		Girls, age 16-19	80

Use in Medicine. For some conditions, ascorbic acid is a necessity; for others, it is a help in restoring the body to normal. It is obvious that vitamin C is the cure for scurvy. Medical science has also found it to be helpful in the treatment of burns, in the repair of fractures, in high fever, in shock, in surgery and in exposure to extreme temperatures.

Of special importance is the use of ascorbic acid by pregnant and lactating patients. The physician must see that the infant receives his share of the essential vitamin, and that the mother's supply is not depleted.

Pharmaceutical manufacturers prepare many forms and potencies of vitamin C for the physician to prescribe.

Which Foods Are Best? Vitamin C is present in many foods. Citrus fruits — oranges, lemons, grapefruit, etc. — are generally good sources. Other fruit, certain green vegetables, tomatoes and potatoes are also sources of the vitamin. There are wide differences, however, between foods and even between varieties of the same food. The differences among commercially canned juices are graphically shown in the following table compiled by the U. S. Department of Agriculture:

Juice	Minimum mg. ascorbic acid/100 mg. juice	Maximum mg. juice
Apple	0.2	3.6
Grape	0	4.7
Grapefruit	10.0	49.0
Orange	9.7	70.0
Pineapple	5.4	18.0
Tomato	2.5	32.0

A Public Health Problem. It's an ironic situation that Americans, who have a plentiful and varied diet available to them, have been found by responsible researchers to have subclinical and recognizable vitamin C deficiencies.

The public relies on processed juices to supply a large part of its daily vitamin C requirement. All unknowing, it often fails to receive even a token amount because of the variations shown.

For these reasons — *widespread deficiencies and inadequate intake* — it is desirable to standardize the vitamin C content of processed fruit and vegetable juices at levels which will guarantee a significant amount of the vitamin per each serving of juice. Diet experts believe that such standardization is in the public interest. It may be achieved by the simple addition of pure, crystalline vitamin C. The Canadian government has recognized the value of this idea and has set a standard which all "vitaminized" apple juice must meet.

Saved: Natural Color and Flavor. Many delicious fruits which are quick frozen lose their natural color and delicate flavor during thawing. By adding pure *l*-ascorbic acid to these before freezing, processors can protect the natural color and flavor during thawing and for some time after. The ascorbic acid acts as an antioxidant; it "takes up" the oxygen in the air before that oxygen can trigger the reactions which cause the undesirable changes.

Vitamin C has been used for more than 15 years as the preferred antioxidant in frozen peaches, apricots, apples, berries, bananas, pears, pineapple, fruit purees and fruit cocktail. It has been used also in canned fruit and fruit juices, sauerkraut, pickles, beer, cured meats, milk, and mushrooms.

Homemakers seeking variety in the fruit and fruit juices served to their families will be influenced to buy the product to which sufficient *l*-ascorbic acid has been added to allow a label claim. When a nutritive claim is made for a food, a declaration must appear on the label. One form reads:

"One four-ounce portion provides 100% of the minimum daily adult requirement of vitamin C."

Processors using the twin benefits of *l*-ascorbic acid — nutritive value and antioxidant effect — are delivering more attractive, more palatable, more popular, and more valuable foods.

●

Yours For the Asking. Summarizing our present knowledge of this vitamin, this article is one of a series published by the Vitamin Division of Hoffmann-La Roche Inc. Reprints of this, and all others in the series, are available without charge. Reasonable quantities will be available to those in education who wish to use the material in their teaching. Send your request to Vitamin Division, Hoffmann-La Roche Inc., Roche Park, Nutley 10, New Jersey; in Canada to Hoffmann-La Roche Ltd., 1936 Bourdon Street, St. Laurent, Montreal 9, P.Q.

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Foreign Policy Study Planned

Finding fault with some facet of the foreign policy of the federal government has become a most popular pastime. It runs through all the areas of political, commerical, and social discussions and disputes. Because of the multiplicity of the ramifications of that policy, its criticism covers so many topics—such a "multitude of sins"—that there is no possibility of subjecting it to informative or constructive appraisal. That is one reason why the criticism is condemned as inimical to this country's foreign relations and that more popular fetish, security, by some of those who are endeavoring to put the United States where it belongs and should be in every respect among the leading nations of the world. They face difficulty in endeavoring to construct and apply a program in which the political, commercial, and social interests and groups will be able to participate in full accordance with their respective capabilities and responsibilities. That difficulty is heavily and seriously intensified by the generally accepted necessity of dealing satisfactorily with the military problem in the Far East.

Just about a fortnight ago a subgroup of the senate foreign relations committee announced plans for a "nonpartisan essentially educational" study of this country's foreign policy on a worldwide scale under a senate appropriation of $300,000, covering two years. The chairman of that supervisory group, consisting of four senators, has been critical of the foreign policy, in goodly part constructively, for some time. He made two speeches on the subject in the late days of the recent session, which are very informative and should be "must" reading among all groups in any way concerned with the improvement of foreign relations.

The chairman has said that at its present stage the group's plan has a broad field encompassing:

"Factors which influence United States foreign policy.

"The formulation and administration of United States foreign policy.

"An analysis of United States foreign policy on an overall basis."

The purpose and general operation of its plan were discussed by the senate group with former diplomatic officials from both political parties and representatives of a number of civic, educational, and publicity organizations and enterprises.

About a week earlier the chairman and seven other members of the foreign relations committee, including two members of the subsequently created study subgroup, asked the President to spend less foreign-aid money for military purposes and more for technical and "self-liquidating" economic assistance. The President told the senators that he would "give thoughtful attention" to their request and expressed the assumption that he could continue to count on the committee's support for his repeated urging of expansion of economic-aid programs which had not got financial backing from congress as a whole.

There may be some good in the direction of foreign policy improvement as a result of the current visiting of the Under Secretary of State in eleven countries in the Near East and Europe, although it does not cover an adequately satisfactory area. It is his expressed purpose to confer with diplomatic representatives of this country on the operations of the foreign-aid program and on "economic problems in general." It is doubtful, however, that he will learn why, for example, Indonesia, direly in need of food, had to make a deal with Russia for several hundred thousand tons of rice, with a trade arrangement favorable to the supplier in the offing and the Indonesian vote for admission of red China into the United Nations an accomplished fact. It is certain that he will not get any satisfactory explanation of why the trade missions sent out by the Department of Commerce are the best, if not the only, source of really useful information on economic conditions and potentialities in foreign countries.

It is not only foreign policy that needs revision. There is a bigger need in the actual activities of foreign relations. In that connection, the policy-studying senators should earnestly invite and generously get the advice of businessmen who know what is needed and can give a goodly measure of useful suggestions on how to go about meeting that need. For the good of all concerned, business organizations should volunteer now to help the senate group in every possible way. That group has a most desirable objective; but there is much reason to believe that, having little other than political qualifications, it will not be able to make very much progress toward the attainment of the practicable—and profitable—potentialities thereof.

Guessing On the Economy

The "experts" are "all over the lot" in their opinions — or guesses — on whether the national economy (commercial, that is) is back on its feet; whether its shoes are too tight for the potentialities of progress; or whether it is ready to set a new speed record in getting into an up-and-upping inflationary spiral which will make the dollar worth about 30 cents. And apparently none of them know what to do about it.

The most significant difference in views is that between the Federal Reserve Board and the New York Federal Bank. The former is making the more optimistic utterances on the situation insofar as the economic upturn is concerned. It also holds the opinion that the upturn has more speed than sense and is likely to result in inflation. For that reason it is expected to keep a heavy, tight hand on the supplying of cash for any federal or private spending which it does not consider to be in keeping with the actual needs of today. That is inducing the financial foreseers to hand out all sorts of advice on what to do about the variously estimated needs for housing, employment, and such things and at the same time in some manner get by the barrier which certainly will be met because of the expected deficit of more than twelve billion dollars in the "finances" of the federal government in fiscal 1959.

The Department of Labor chimes in with a report that the cost of "living" dipped 0.2 percent in August, for the first break in two years, largely because of height-of-season downpushing of the price of food. Because the official record took a jump of 0.2 percent a month earlier, what really is the answer? At that time a drop of 0.1 percent had been reported by the National Industrial Conference Board. Nobody, however, appears to be expecting that group to find that the latest official report of a drop had no basis in fact.

Pronouncements and denials, or contradictions, run all over the place. Three weeks ago President Eisenhower ordered that about 47,000 persons or jobs or something be eliminated from the federal payroll within some indefinite period, in an effort to change the recording of financial conditions from red to black. Two days later there appeared in the public prints a statement, attributed to the Director of the Budget, that the administration had formally decided to freeze, at least for the time being, more than a billion dollars in military funds voted in the recent session of congress! The next day the Secretary of Defense denied that any such action had been taken, but said so much that he was assumed to imply that the President had been asked to reverse an earlier decision to freeze the extra funds. One may be puzzled by the variety of statements, but he is practically forced to conclude that at least one anti-inflation move—reduction of government spending—is not going to be made.

Those who are assuming that the economy has at least got back on its feet point to, among other things, the report that sales of the nation's retail stores are now off less than one point from the 1957 peak. But, they are not interpreting the significance of the data that, even in lines where receipts from sales are running at new highs, net earnings are well below those of a year ago. The interpreting of the significance of the value of sales never does give due weight to the difference that may or actually does exist in unit prices—to say nothing of operating costs.

Where the economy is and especially whither it is headed is still anybody's guess. One thing to be mindful of, however, is that basing a guess in any special degree upon the volume of government spending or the results of easy-money-making activities in stock markets will be misleading. Those are unsound inflationary factors.

Block That Air-Mail Ban

Evidently it is not only among the three arms of the national defense service that consultation, cooperation, and coordination have but minor roles in interrelations. The condition is known to be common in government circles. It must exist even at departmental levels; otherwise it is very difficult to see why the Pharmaceutical Manufacturers Association should be worried that the Post Office Department is likely to prohibit the shipment of etiologic agents by air mail.

Neither that department nor the airline operators whose attitude is behind the expected ban can be assumed to have any knowledge of or thoughtful concern for the needs of public-health service. They have troubles enough of their own to keep them fully occupied. But, because they are—one governmentally, the other privately—in the service of the public, they should exercise adequate precaution to avoid any measure of interference with the health service of the public. If the feared ban on etiologic agents should be imposed, there certainly will be a most flagrant disregard for the needs of that service.

It is reasonable to conclude that, if the Post Office Department had got the advice of the Department of Health, Education and Welfare, there would be no grounds for the fears on the part of the pharmaceutical manufacturers.

Now that the PMA has been joined in its protest by the Public Health Service, the National Institutes of Health and the American Medical Association, among others, there is more than a little reason to expect that the Post Office Department will respond affirmatively to the general outcry for full reasonable and necessary use of air-mail services. The information that it has got from the pharmaceutical manufacturers and others will teach it what it should know. It is to be hoped that there will be no need to carry the matter to the President.

Washington Talks It Over

Big-League Trade Meetings Are to Take Place in Europe, But US Will Be on the Outside Looking In.

By Ralph L. Cherry
Chief, OPD Washington Bureau

Two meetings vitally important to future trade of the United States with Europe, but in which the US can only look on as an observer, will be held in Europe within the next few days. They concern the current effort to provide a freer flow of trade among the European nations by abolishing tariff walls between themselves along with other restraints of trade.

The first meeting will be made up of the representatives of the six companies which comprise the European Economic Community (Common Market), and the other will be a meeting of the seventeen countries, including the common market group, seeking to set up a European Free Trade Area.

Some very basic problems and differences have developed between the group, however, which will have to be solved before the planned goals are reached.

For example, the common market group has agreed to transfer a number of specific economic activities to the jurisdiction of a supra-national authority, but is opposed to extending the same trade rights and advantages to other countries unless they also are prepared to forego like sovereign rights. Some of the eleven are unwilling to do this to get into the common market—Switzerland, for example, which is bound by its historical principle of neutrality, and the United Kingdom which is tied historically and economically to the other members of the commonwealth.

Another basic difficulty is that of joining in a free trade area countries with marked differences in economic structure and development. Also, there is the problem of tariffs against "outsiders." The common market group has a common external tariff, but in a free trade area only internal tariffs between members are abolished while each member retains freedom of action as to its external tariffs. In an area of many individual tariffs, trade could be expected to flow to the country with the lowest tariffs.

Because of these and other perplexing questions, it is not expected that an agreement will be ready to go into effect by the target date of January 1, 1959, but it is believed that an agreement can be concluded some time later in the year.

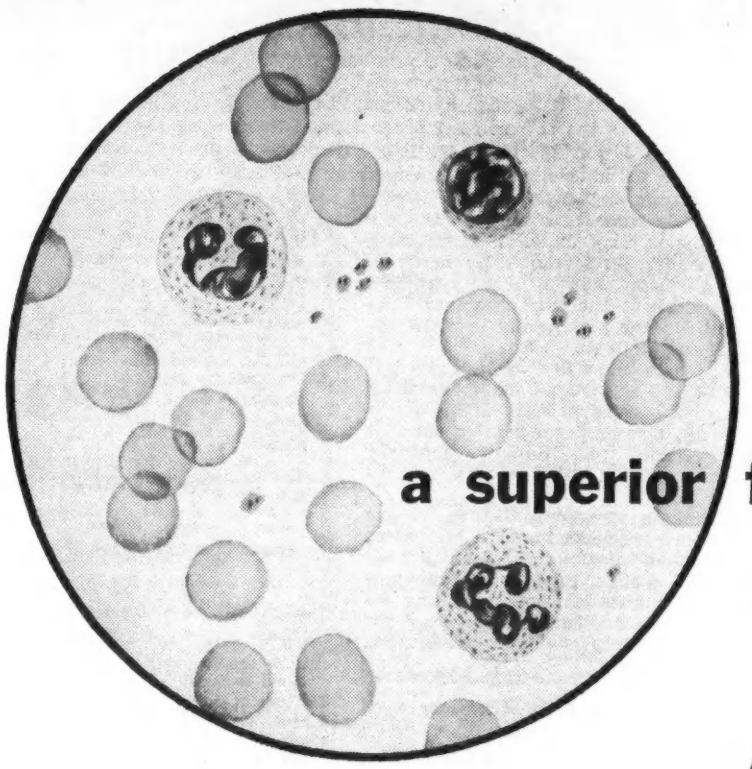
From the standpoint of effect on US markets in western Europe, it can be expected that US commodities will be replaced by local production. But on the other hand, US officials feel that the increase in productivity which should be the final result of such associations will lead to greater purchasing power and thus widen the markets for specific US goods.

IRS Will Push Tax Ruling Data

When the Internal Revenue Service gets beaten in court in an important case and decides to accept the defeat, the public will know about it quickly in the future.

The agency has just adopted a new policy of letting the public know that it is conforming with the court's decision without further delay. This will furnish an immediate guide on each affected issue for taxpayers, and will forestall the accumulation of further court cases.

Heretofore it has been the policy to delay such announcements until the necessary modification or revocation of outstanding rulings or regulations are made. Now, the announcement will come first and the affected rulings will be revoked as soon as the agency can get around to it.



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1. Shapleigh, J. B. and Montgomery, Austin: A Clinical Trial of a New Iron Compound, Ferrous Fumarate (to be published).

NOTE: Anhydrous ferrous fumarate is covered by U. S. Patent No. 2,848,366 granted to Mallinckrodt on August 19, 1958.

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* REG. U.S. PAT. OFF.

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Heavy Chemicals

Chemical business generally continued on the upgrade last week. One helpful factor was the rise in steel production. Steel output reached an estimated peak for 1958 during the week. Labor relations in the auto industry looked a bit more cordial following settlement of a dispute with one auto producer. Preliminary estimates by the Bureau of Census on July production of specified chemicals show that in general, July was better than June. This situation is considered remarkable by many in the chemical industry since normally, July is about the most stagnant sales month in the year, owing to plant vacation shutdowns.

Although blanc fixe was advanced, it didn't look as though barium chemicals would be boosted, at least for the fourth quarter. One producer pointed out that competition from foreign materials, notably barium chloride, was particularly keen.

Moroccan manganese dioxide ore was drastically reduced in price last week. African chemical grade ore continued without change. Producers of manganese chemicals last week did not believe the reduction in Moroccan ore would influence chemical prices here.

Price Trends

Advanced

Potassium stannate, 1.3c. per lb.
Silver, ¼c. per oz.
Sodium stannate, 1.4c. per lb.
Stannic chloride, 1.4c. per lb.
Stannous chloride, anhyd., 1.8c. per lb.
Hydrous, cryst., 1½c. per lb.
Stannous Sulfate, 1.7c. per lb.
Tin, 2⅛c. per lb.

Reduced

Cadmium, 10c. per lb.
Mercury, $2 per flk.
Platinum, $1 per oz.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Sept. 27, 1957
104.64	104.81	104.69	103.53

For Current Prices See Page 9

October 1 Price Advances

Aluminum chloride, anhyd., bulk, ½c. per lb.
dms., 1c. per lb.

Despite a number of increases in aluminum chemicals, including calcined alumina, aluminum hydrate, chloride and iron-free sulfate, there has been no change reported for aluminum fluoride.

Lime plant operations appear more encouraging, as the general production picture shows plants operating at about 80 percent of capacity.

The tin market recovered much of the ground it lost the previous week. This was thought due to an agreement with the Soviet Union not to dump tin and depress world markets. However, cadmium, mercury and platinum turned weaker.

The American Paper and Pulp Association reported production for the week ended September 20 at 91.2 percent of theoretical capacity, as compared with the revised figure of 91.5 percent for the previous week, and 89.9 percent for the corresponding week of last year.

Acids

The following preliminary figures, compiled by the Bureau of Census, report production of specified acids in tons.

	July	June
Hydrochloric	60,301	64,291
Nitric	191,792	175,533
Phosphoric	139,843	139,295
Sulfuric (gross)	1,207,498	1,216,192

Hydrochloric—Steel output continued to pick up last week, and as a result, acid business was also better. Number and volume of shipments was said to be picking up all along the package line from barges to carboys.

Hydrochloric output declined in July, according to the Bureau of Census. However, the supply picture looked better at the end of July than at the end of June. Stocks decline from 12,021 tons in June to 11,891 tons in July.

Nitric—With steel having reached a 1958 peak last week, producers felt that the nitric market would benefit accordingly in sales. July output rebounded considerably from June levels. At the same time, there was actually a slight decline in end-of-month stocks.

Reserves eased off to 17,098 tons July 31, compared with a June 30 inventory of 17,319 tons, according to the Bureau of Census.

Phosphoric—Industrial demand is about steady. Inquiry for detergents is on the upgrade after a seasonally slow summer. Food grade business for the summer beverage trade has eased off to some extent.

Phosphoric acid output in June and July held about the same. There was a drastic reduction in inventories during July, however. July 31 stocks amounted to 15,182 tons, compared with June 30 reserves of 20,096 tons, the Bureau of Census says.

Sulfuric—Steel, rayon and alkylation needs are stronger now than during the previous week. Continued modest improvement is forecast for the next few weeks.

While output of sulfuric acid didn't change much from June to July, stocks climbed to 508,395 tons in July from 482,882 tons at the end of June.

Steel production was estimated to have reached a 1958 high last week by the American Iron and Steel Institute. Production was seen at 1,793,000 tons, or 66.4 percent of capacity.

The previous week's output was down slightly, to 1,771,000 tons, or 65.6 percent of capacity. Reason for the decline was a labor dispute which temporarily halted steel output at an auto company.

Bases and Salts

The following preliminary figures, compiled by the Bureau of Census, report production of specified chemicals in tons:

	July	June
Calcium carbide	63,357	59,728
Caustic soda, electro	287,264	286,785
Lime soda	30,168	31,656
Chlorine gas	283,355	279,637
Soda ash, syn	345,465	338,370
Nat.	52,544	38,933

Aluminum Chloride—Anhydrous prices will be increased on spot and contract October 1. Liquid prices went up the previous week. Price rise for anhydrous is due in large part to the rise in aluminum metal quotations. Liquid prices were boosted because of a general accumulation of production costs over a long period of time.

Aluminum Fluoride—Despite price increases for some of the other aluminum chemicals, quotations on fluoride have continued unchanged. Observers say that this situation is likely to continue in the near future.

Aluminum Sulfate — Iron-free sulfate was lifted last week, but it now looks unlikely that granular sulfate quotations will change, at least during the fourth quarter.

Barium Chemicals—There was a report last week that blanc fixe would be raised in price in the east. However, barium chemicals listed in the heavy chemicals market are not likely to change during the fourth quarter.

This is the opinion of one producer, who points out that current business is rather soft, and supplies are freely available. The muggy market is attributed chiefly to lack of demand in the lube oil additive field, which accounts for a large chunk of the overall market.

Business in the lube oil additives field has been off most of the summer, it is reported. This is not because of lack of demand at the lube consumer level; rather, it reflects liquidation of inventories by the petroleum industry.

Caustic Potash — Business is moving along at a much improved pace, and producers admit that they're breathing easier after a long, slow summer.

One end use showing a marked uptrend is in the soap and liquid detergent field, although it is emphasized that demand is better throughout the end use pattern.

Caustic Soda—Demand is about steady, with some slight improvements, notably in rayon and paper. Caustic is right now in a better market position than its co-product, chlorine, most makers concede.

Chlorine—There is a slow, steady increase in demand throughout the end use pattern. Producers last week could single out no one particular use as showing any spectacular surge. There is still plenty of chlorine around.

Lime—Lime plant operations have shown some slight increase during the

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Heavy Chemicals

past few weeks. The national average is reported at about 80 percent.

Plants in the northeast, dependent to a great extent on steel operating rates, are producing lime at about 70 to 75 percent of capacity.

Some shortages of special-type railroad equipment have been reported, but it is felt that this is primarily due to curtailment of railroad operations, in that empty cars are not moving back to loading points as rapidly as could be expected.

Soda Ash—Demand from the glass container industry has been called excellent all summer. This has helped in a large measure to offset slower inquiry for flat glass used in autos and new construction.

Tin Salts — With tin's recovery, potassium stannate rose to 75c. to 82.3c. per pound; sodium stannate, 60.3c. to 66.2c.; stannic chloride, 76.2c. to 77.2c.; anhydrous stannous chloride, 95.8c. to $1.453; hydrous crystals, 83c. to 84c.; and sulfate, $1.015 to $1.035.

Nonferrous Metals

Cadmium — Metal declined 10c. per pound last week due to competitive influences, and was quoted at $1.45 per pound.

Manganese Dioxide—African material continued without change, quoted at $144.50 per ton for chemical grade. Last week, Moroccan manganese dioxide declined $7.50 per ton, newly quoted at $122 per ton.

Mercury — Metal eased off, and was quoted at $237 to $240 per flask, spot, last week.

Platinum—Metal declined to $55 to $60 per troy ounce last week.

Silver—Bullion advanced to 88⅞c. per troy ounce on Friday.

Tin—This metal recovered much of the ground it lost the previous week. This was said to be due to a pledge by the Soviet Union governing dumping of tin. Straits metal was quoted at 94⅜c. per pound, spot, on Friday.

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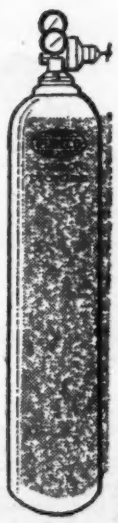

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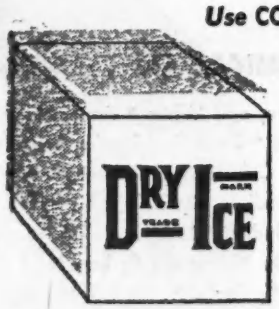

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Obituaries

Wells F. Anderson

Wells F. Anderson, a director and senior vice-president of National Gypsum Company, Buffalo, N.Y., died September 21 in that city. He was fifty-six years old.

Mr. Anderson joined the company in 1951 as production manager. In 1954 he became vice-president of manufacturing and in 1956 he was made a director and senior vice-president of operations.

John F. Callahan

John F. Callahan, general traffic manager for Sun Chemical Corporation, Long Island City, N.Y., died September 19 in Provincetown, Mass. He was sixty-one years old.

Charles Lynn

Charles Lynn, vice-president and member of the board of directors of Eli Lilly & Co., Indianapolis, Ind., died September 22 in that city. He was eighty-four years old.

Mr. Lynn joined Lilly in 1895 following several years in the drug field with other firms. He opened various branch offices and was appointed sales manager in 1906 and helped open the European markets for Lilly.

Mr. Lynn became a member of the board in 1913, secretary in 1919 and vice-president in 1932. He retired in 1945.

George O. Maywalt

George O. Maywalt, president of Moore & Co., Worcester, Mass., died September 8 in that city. He was forty-eight years old.

Mr. Maywalt was head of Moore & Co. since his purchase of the firm in 1947.

Russell H. Young

Russell H. Young, president of Davies Soap Company, Dayton, Ohio, died September 20 in that city. He was fifty-eight years old.

Long active in industrial association affairs, Mr. Young served on the board of governors of the Chemical Specialties Manufacturers Association and was a member of the board of directors of the Association of American Soap & Glycerine Manufacturers.

Thomas E. Ronan, retired manager of sales administration for Ethyl Corporation, New York, died September 24 in Larchmont, N. Y. He was fifty-nine years old.

Dr. Marvin O. Shrader, supervisor of organic chemicals research for Pittsburgh Coke & Chemical Company's research and development department, Pittsburgh, Pa., died September 21 in that city. He was forty-five years old. Dr. Shrader had been awarded numerous US and foreign patents in the field of industrial chemistry. He joined Pittsburgh Coke in 1952 and had previously been with General Aniline & Film Corporation, New York.

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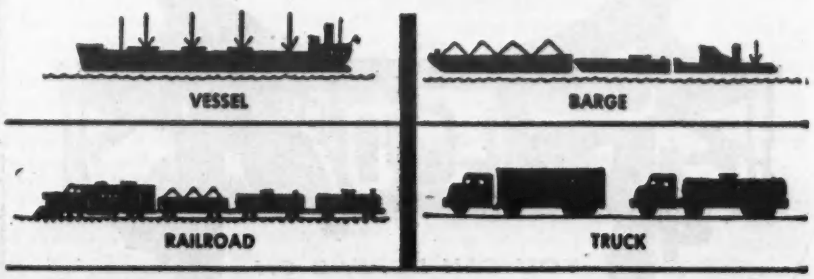

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CIA Speaker Will Talk On Atomic Energy Future

J. Carlton Ward, jr., president of Vitro Corporation of America, will talk on "Atomic Energy—A Growing Market for the 1960's," at the opening 1958-59 meeting of the Chemical Industry Association, today, at the Brass Rail restaurant, 100 Park avenue, New York.

Jack R. Ryan, New York *Times* staff writer, will be a special guest of the association.

Potash From Sea Saline Hikes Israeli Output

Israeli potash production from salines of the Dead Sea totaled as much during the first half of this year as was produced during all of 1956.

Extraction, which had ceased during the Israeli-Arab conflict, was resumed in 1956 with an output of 47,000 tons. This figure was strongly outstripped in 1957 with a production figure of 78,000 tons, and this year, output during the first six months has approximated that of the 1956 total figure.

Plans have been made to increase production to a million tons.

Gen'l Tire & Rubber Fills Chemical Positions

Three new executive positions have been filled in the chemical division of General Tire & Rubber Company, Akron, Ohio.

John A. Kleinhans has been made manager of manufacturing; George Hackim, jr., has been appointed general sales manager and L. W. Reeves has become commercial manager.

Mr. Kleinhans, in his new position, will direct the activities of the three production facilities of the chemical division at Mogadore and Ashtabula, Ohio, and Odessa, Texas, through the respective plant managers.

Mr. Hackim will direct the work of product sales managers, sales development and technical services, while Mr. Reeves will serve in a staff capacity to coordinate the marketing program of the division including sales abroad.

Starch Seen in Mud

—*Continued from page 4*

swell to a certain extent, but not to jell when cooled. In producing the new non-jelling starch, the first step is a chemical process known as cross-linking. It retards water uptake and swelling. Enough cross-links can be added, if desired, to prevent starch from swelling even at temperatures above the boiling point of water. Modified starches of this type have been produced for use as dusting powders.

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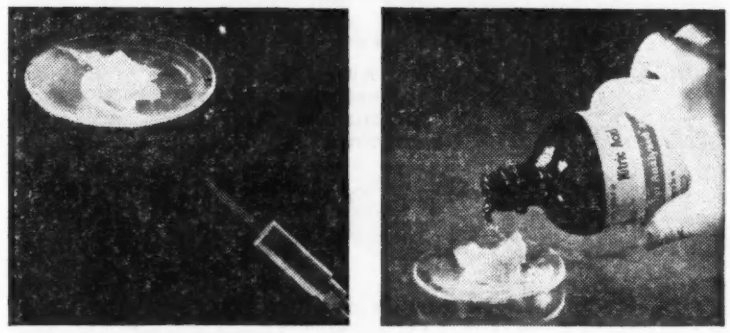

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Mallory-Sharon Revamps Its Marketing Department

Mallory-Sharon Metals Corporation, Niles, Ohio, has completed a reorganization of its marketing functions. The reorganization follows closely Mallory-Sharon's entry into the refining and production of such special metals as zirconium and hafnium.

Heading the new Mallory-Sharon marketing team is Graham B. Brown, recently named vice-president of the company (see picture page 7). Mr. Brown previously was vice-president of Tube Reducing Corporation, Wallington, N.J.

Assisting Mr. Brown will be R. E. Cunnick, Assistant to the vice-president. Mr. Cunnick will also serve as steel sales manager, directing marketing and sales efforts in specialty steel products. General sales manager for titanium and special metals will be G. B. LeVan. William G. Fetter will be general sales manager for zirconium. James R. Chisholm will assist Mr. Fetter at Niles, supervising the sales functions relating to zirconium. Eastern sales manager for zirconium, will be W. C. Greenleaf.

Olin Mathieson Building Waterway Shipping System

Olin Mathieson Chemical Company is traveling by water. In two moves last week the New York firm tied in two major water arteries of its national and pan American production network.

First move was the launching of a 22,600 ton ore ship specifically designed to transport bauxite non-stop from Smalkaden, Surinam, to Burnside, La.

The second move was the arrival of a fourteen-barge shipment of 20,000 tons of alumina at Hannibal, Ohio, following a 1,700 mile trip from Burnside. The shipment over the all-water highway is the first of fifteen regularly scheduled trips a year.

According to Olin, the ore ship, with two sister ships, will begin to transport approximately 700,000 tons of bauxite a year beginning sometime in 1960.

Sun Chemical Appoints Two to Engineering Posts

Frank J. Senters has been named director of engineering of Sun Chemical Corporation, Long Island City, N. Y., and A. C. Finalborgo has been appointed chief engineer. Both men will make their headquarters in Sun Chemical's New York office at 750 Third ave.

Mr. Senters joined the corporation in 1954 and was previously assigned as a staff engineer in the production coordinating department. Mr. Finalborgo has been with the corporation's production coordinating department since 1953.

Calcium Group Names Todd To Head Its Information Unit

Harry Todd, advertising manager of the Solvay Process Division of Allied Chemical Corporation, New York, has been named chairman of a newly-formed committee of the Calcium Chloride Institute.

Mr. Todd's committee, which consists of representatives of other calcium producers, was formed primarily to keep the trade informed on the latest technical and engineering developments in the industry.

CACA PRESIDENT: J. H. Elliott, of Rohm & Haas Company of Canada, Ltd., West Hill, Ontario, elected president of Canadian Agricultural Chemicals Association.

Gallows Birds to Meet During FPVPC Session

The fifteenth anniversary of the Society of Gallows Birds will be observed in Cleveland, Ohio, October 8, during the annual meeting of the Federation of Paint & Varnish Production Clubs.

Members of the society will convene in the Empire Room of the Cleveland hotel for a luncheon meeting, at which time officers for the coming year will be elected and new members initiated.

Research Service Organized

A chemical market research service has been organized by James M. Margolis at 10 East 39th street, New York. The service is directed toward chemical specialties, particularly the plastics and pharmaceutical fields. Mr. Margolis was formely a research chemist at Dewey & Almy Chemical Company, a division of W. R. Grace & Co., and more recently at Stauffer Chemical Company.

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Agricultural Chemicals

Except for a few variations in the animal proteins price structure, quotations in this market remained unchanged. Buying in the markets where strong discounts are still in effect continued on a pretty fair level, producers reported, as dealers moved to get in their purchases under the October 1 deadline. Producers in the animal protein market report that conditions in this off-seasonal period remain soft and are expected to continue so until season buying commences in some thirty to sixty days. Price shifts last week involved a $2 per ton hike in both fishmeal and fishscrap and more limited advances in the on-again, off-again tankage market. In the other areas of the market, movement remained relaxed and little change was anticipated until some seasonal buying starts in a couple of months. Also, of course, new, tighter discount schedules going into effect October 1 should slow down the demand pattern, at least for a while.

Iran is asking for bids for construction of a fertilizer plant with a capacity of 250,000 tons of ammonium sulfate and 21,000 tons of sulfuric acid annually. Tenders must be submitted by December 15 to the Ministry of Development, Directorate General of Legal Affairs and Contracts, in Baghdad.

Price Trends

Advanced

Fishmeal, $2 per ton.
Fishscrap, $2 per ton.
Tankage, N. Y., 25c. per unit-ton.
Chicago, 50c. per unit-ton.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Sept. 27, 1957
108.55	108.41	108.33	110.72

For Current Prices See Page 9

October 1 Price Advances

Ammonium nitrate, $5 per ton.
Anhydrous ammonia, $4 per ton.
Aqueous ammonia, $4 per ton.
Nitrogen Solutions, $4 per ton.

Animal and Plant Foods

Reports from a number of states on fertilizer sales reflected a rise in sales for a northern and a mid-western state while two southern states appeared to continue to limp. The reporting states are not considered representative of sectional trends, and in one instance the problem is decidedly local. Reporting from the north was Michigan while Arkansas showed figures for the midwest.

Wisconsin fertilizer sales during the spring of 1958 were 377,740 tons compared with 352,407 tons for spring, 1957. Most popular grade, the report says, was 5-20-20 which sold 99,143 tons compared with 87,014 tons in the spring of last year.

Fertilizer sales in Arkansas during July were reported slightly above sales for the similar month last year. Grand total sales were 20,611 tons compared with 20,457 tons for July, 1957. Material sales totaled 17,031 tons; urea being the most popular with 5,626 tons being sold. Ammonium nitrate was the second highest seller, with 2,556 tons, followed closely by anhydrous ammonia with 2,527 tons.

The two southern states reporting fall-offs were Alabama and West Virginia. July fertilizer sales for Alabama dropped approximately 2,991 tons from the July sales figure of the year previous, according to that states agricultural department. Tonnage sales this July were 14,161 tons.

In West Virginia the gradual decrease in the number of farms and retirement of cropland through government programs were considered reasons for the drop in sales.

Anhydrous Ammonia—The sale of this material as a nitrogen fertilizer increased 14 percent for the first seven months of the year over the same period of 1957, according to a recent report. The report noted that the indicated upturn was unexpected in view of widespread reports earlier in the crop year that weather conditions were hampering application. It was felt, the report said, that increasing farmer acceptance, along with generally higher rates of application, accounted for most of the gain. The report was made of a survey covering 152 dealers who distributed 108,793 tons or about one-fourth of the amount used annually by US farmers. Two-thirds of the dealers, the report noted, showed increases in their business.

Production of anhydrous ammonia during July amounted to 294,669 short tons, according to a report by the Bureau of Commerce. This figure is something of a comedown from the June output of 336,309 short tons. A partial answer to the output story may be found in stock figures for the period. Stocks at producing plants were tallied at 137,516 short tons as against the 112,230 short tons in stock the month previous.

Ammonium Nitrate—July production of this material, according to the Department of Commerce monthly report, amounted to 176,748 short tons as compared with the somewhat smaller figure of 154,204 short tons produced during the month previous. Figures for stocks at producing plants showed a similar ratio. July stocks stood at 232,759 short tons while June stocks were tallied at 174,796 short tons.

Animal Proteins—This market remains slow during this off-seasonal period. One source suggested that the pick-up should begin in about thirty to sixty days when seasonal buying should commence. Prices for the most part remained static. Tankage, which has been vacillating during the past weeks, moved up last week. Current quotes are $7.00 per unit-ton in New York and $7.75 per unit-ton in Chicago. The New York price is a 25c. hike; the Chicago quote is a 50c. move. Dried blood, which had also been moving in price during previous weeks, stood at a $6.50 level in New York and $7.00 in Chicago. Bonemeal also stood at its previous level of $65; Castor pomace continued at $37.50 and hoofmeal stood at $6.25. Both fishmeal and fishscrap were hiked in price. Dealers reported a strong market with demand good and supply limited for both items. Present quotes for fishmeal range between $138 per ton while fishscrap prices are ranging between $13 and $136 per ton. Both schedules represent a $2 per ton advance in price.

Lime—Producers reported last week that demand has improved to some extent. This is based partially on the fact that production is now at about 80 percent capacity.

Superphosphate—Production of this material for the last fiscal year (July, 1957 to June, 1958) was 5 percent greater than that of the previous year, according to a report by the Department of Commerce. Greatest gains, the report says, were recorded in concentrated phosphate.

Pesticides

According to the US Tariff Commissions annual report, things didn't look too good last year. This, of course, tallies with producer reports that have been appearing here over the past year. The commission's survey on pesticides notes that output for 1957 dipped 10 percent below that of the previous year. The production of pesticides and other organic agricultural chemicals amounted to some 512 million pounds, the survey says.

One authority in herbicides said that the uneven demand pattern in the pesticide market has made for a confused picture. According to the authority, while prices declined and demand slipped off for some items, tight supply situations existed in others at the same time.

Pyrethrum—According to one source, this material is again taking a major role in the insecticide industry after losing considerable ground to some of the newer insecticides. The information source notes that reports from Kenya say that more acreage has been planted this year. Also reported was the fact that a fully automatic pyrethrum processing and extracting plant is now under construction in Nakura, which is expected to be in operation by the end of the year. Reports further note that laboratories have produced, on an experimental basis, an extract which may offer possibilities as a cattle dip or spray. The material lost a great of ground during the war years when supplies were impossible to move. Prior to the war, pyrethrum held a major place in the pesticide world.

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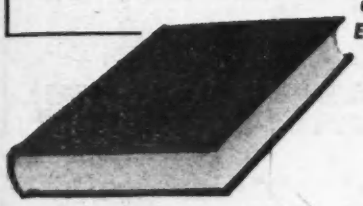

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Petroleum Derivatives

The automobile industry has jumped the first of a series of labor-management hurdles with the signing of the Ford-UAW contract. However, some major barriers still stand in the way of the industry's climb away from the recent market slump. Of top priority in this list is the GM contract yet to be signed. Some sources suggest that the Ford contract will set the pattern for the rest of the industry. However, others feel that the signing was a move to divide the opposition and that the rest of the bargaining will be on a much stiffer level. In the market for petroleum derivatives, the present labor developments have failed to make any mark whatsoever. Sales and production remained pretty much at previous levels, with seasonal materials continuing to reflect minor fall-offs in demand. LPG's, according to producers, are running-into somewhat sturdier queries from dealers for pre-seasonal storage. Microcrystalline wax, reflecting some loss from the decline of its seasonal demand, still stands in a warm spot in the market. Toluene, according to producers, is still basking in the renewed show of government interest in the material. Xylene and benzene failed to show any variation in their position since the recent price cuts instituted in both.

A European oil company executive has come up with what he says is a method of doubling the world's oil reserves. The suggested method uses steam-injections and by burning the oil in the fields it is considered possible to boost the production of heavy oil from the present 10 percent to 25 percent of the field's capacity to about 50 percent.

Two elements in the oil market: gasoline and marine fuel, have been depressed in price. Gasoline prices were cut last week in Connecticut. The New England picture has been shaky for some time. Also, gasoline prices have been cut recently in one of the mid-western states. Also, marine fuel prices were cut by one major producer in fourteen ports.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Sept. 27, 1957
104.54	104.54	104.54	106.64

For Current Prices See Page 9

It is acknowledged that the market as a whole has taken no sharp step forward, but the present development, coupled with prospects of further military buying in the immediate future, leave the market future looking much rosier than had initially been hoped for for this time of year. Some sources suggest that present hopes will be exploded if the present war scare should evaporate; however, most realistic producers feel that the tension will not ease for some time, if at all.

Xylene—No variations were reported in the position or condition of this market. Light demand coupled with strong supply remains the story of the day. Some sources feel that the present slow climb of the industrial markets may help lift the material out of the trough. Price structure remains at recently reduced levels. The material is quoted in Bayonne, N. J., at 29c. per gallon; Baytown, Tex., at 27c.; Charleston, S. C., at 29c.; Chicago, Ill., at 30c.; Providence, R. I., at 30c. per gallon and Sewell's Point, Va., at 28c.

Solvents and Diluents

Benzene—Producers here reported last week that the market for this material remained pretty much at levels extant prior to the recent price cut. Primarily involved is the continued weak condition of the automobile industry. Of late, reports of conditions in this and the related steel market, have shown an upswing. However, conditions have not yet improved to the point where contributary markets such as that of benzene, have been strengthened to any great extent. One positive factor that has evolved out of the continuing negative situation is the cutback in foreign benzene coming into the country. At a time when American material was suffering badly from the economic drought, foreign material was pouring into the country at sharply reduced schedules. However, with the weakened demand picture, the flow of foreign material coming in slowed down to a trickle and the hope is that such will remain the case.

Cleaners Naphtha — The sales of this material continued to reflect the post seasonal fall-off. The market as a whole has shown some decline during the past years as a result of the growing use of synthetic fibre in clothing. However, sales during the summer months, one source reported, were better than had been anticipated.

Toluene—Producers here continue to report that stepped-up government buying has given the market a much needed boost.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended Sept. 13 totaled 240,716,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 243,308,000 barrels for the preceding week, this represents a decrease of 2,592,000 barrels comprising a decrease of 1,526,000 barrels in stock of domestic crude and a decrease of 1,066,000 barrels in stocks of foreign crude.

LPG's

Propane — Production of this material during the last two weeks of August was tallied by the American Petroleum Institute at 125,360,000 gallons, a rise over the August 1-15 tally of 115,776,000 gallons and the 116,162,000 gallons produced during the last two weeks of July, 1957. Figures for the last two weeks of August amounted to 115,435,000 gallons. Inventories of propane at plants, terminals and underground on August 31 amounted to 466,365,000 gallons, according to the API report. Stocks on August 15 were somewhat lower at 433,459,000 gallons while tallies at the end of August, 1957, were 540,694,000 gallons.

Butane—Production of this material during the last two weeks of August was tallied by the American Petroleum Institute at 71,990,000 gallons as compared with the 64,958,000 gallons produced during the first two weeks of August and the 66,249,000 gallons produced during the last two weeks of July. Production of butane during the last two weeks of August of 1957 amounted to 53,605,000 gallons. Inventories of butane at plants, terminals and underground was tallied at 227,445,000 gallons on August 31 as compared with the 224,850,000 gallons in stock on August 15 while the stock figure for August 31 of last year was 276,953,000 gallons.

Waxes, Mineral

Microcrystalline — The market for this material continued at previous price levels, dealers here reported last week. Production and sales also remained pretty even. There doesn't appear to be anything in the market that should prompt a price movement. The price schedule for microcrystalline has remained static for some time.

Miscellaneous

Crude Oil—Current reports for the industry for the week ended September 12 indicate a decrease in crude oil production and a decrease in crude runs, according to a report by the American Petroleum Institute. The daily average output of crude (including lease condensate), was 7,009,000 barrels, a decrease of 51,000 barrels from the preceding week. Daily average crude runs to stills of 7,845,000 barrels were 137,000 barrels below the preceding week, and 211,000 barrels below the week ended September 13. Runs of foreign crude amounted to 921,000 barrels daily, compared with 921,000 barrels in the preceding week.

Selections for Your Bookshelf

DOCTOR SQUIBB—THE LIFE AND TIMES OF A RUGGED IDEALIST. By Lawrence G. Blochman. Cloth; xij—371 pages, 5½ x 8¼ inches. New York: Simon & Schuster. $5.

Edward Robinson Squibb was one of the leaders in the transformation of medical chemistry from an ancient practice to a modern profession. He was an almost lone pioneer in the fight for statutory and ethical correction of the evils of inadequacy of standards for drugs—and foods. His name has come down through a century as that of an esteemed producer of fully reliable therapeutic agents. But, he is practically unknown beyond certain pharmaceutical circles today. He is not recognized in the 1952 Funk & Wagnalls or the 1956 Colliers encyclopedia.

Doctor Squibb was not only an idealist; he was equally rugged as an individualist. And although he was called a quarrelsome Quaker and had a reputation for stubborness, his humanism was of necessary and effective service in many areas of public needs. He was a physician, a chemist, and a pharmacist in a fully professional sense. He had a deep, constructive, and educative interest in art, music, and literature.

As the publisher of his biography says, Doctor Squibb was a big business man who was not a robber baron. His individualism was most emphatically demonstrated in his business policies. He did not believe in advertising of medical products and was severely critical of certain practices in that field. Because he promoted products of his enterprise in articles in medical and pharmaceutical publications, and in addresses to groups in those professions, he was called inconsistent—and worse. But, what he promoted any manufacturer could offer; he had no tradenames; he did not patent anything that he discovered or invented.

This biography is drawn quite extensively from Doctor Squibb's comprehensively detailed private diaries, covering fifty-five years following his service as an assistant surgeon in the US Navy, starting at the time of the Mexican War. The story of the man, the various aspects of his multipartite life, and his times is an interesting and informative one for any reader, whatever may be his interest in the professional, social, civic, and political development in this country.

AN INTRODUCTION TO THE CHEMISTRY OF FATS AND FATTY ACIDS. By F. D. Gunstone. Cloth: 161 pages, 6x9½ inches. New York: John Wiley & Sons, $6.

This is a technical textbook type of publication by the lecturer in chemistry at the University of St. Andrews. The book takes up the subject of fatty acids with respect to nomenclature, classification, saturation and unsaturation, branched chain compounds, determination of molecular structure, and synthesis.

It deals with the chemical nature of fats, the physical properties of fats and fatty acids, their chemical properties with respect to such reactions as hydrolysis, esterification, hydrogenation, and oxidation. Also discussed are thermal polymerization, halogenation and the like. The books ends with a discussion of technical applicataions and end-use patterns.

VINYL RESINS. By W. Mayo Smith. Cloth. 282 pages, 5x7½ inches. New York: Reinhold Publishing Corporation. $5.75.

This little volume was designed primarily to indicate the uses and applications of vinyl resins. Vinyls constitute the most versatile and largest selling family of plastics, spreading over an extremely wide end-use pattern.

In simple understandable language, the author has set forth the scope of the vinyls, types and properties of the various vinyl polymers and copolymers, something of the chemistry of the vinyls, and their manufacture and fabrication.

However, the most practical and useful portion of the book is that which details the applications and uses of vinyl resin materials. Such fields of use as automotive, aircraft, film, hose, sheeting, paints, tapes, flooring, and many more are discussed.

PETROLEUM. By G. A. Purdy. Cloth; 344 pages, 7x9 inches. New York: McGraw-Hill Book Company. $15.

This book has some 114 illustrations, which brings the total pages up to 500. It is an account of the petroleum and the petrochemical industries, tracing their development from geological and archaeological beginnings to present-day products.

Written in a way that will appeal to both the non-technical reader and the petroleum expert, this volume combines basic ideas with the latest technical concepts, and is designed to fill the need for an authoritative standard reference on the technology and products of petroleum.

Dow Overseas Unit Formed in Venezuela

Dow Chemical Company, Midland, Mich., has formed an overseas subsidiary company in Venezuela to handle its international operations.

The wholly-owned subsidiary, Dow Chemical International, Ltd., S.A., will consolidate overseas sales of Dow products and administer the company's business interests and investments abroad. Offices have been opened in Caracas, and Robert F. Kincaid, formerly manager of Dow's Montevideo, Uruguay, office has been appointed manager.

Potassium Iodide Added To Dow Chemical Line

Dow Chemical Company, Midland, Mich., has added potassium iodide USP crystals to its pharmaceutical chemicals line. Dow is offering this product to the market for the first time. Principal uses for the material are in medicinal compounds, photoengraving and photographic film processes and in analytical reagents and catalysts.

Prices per pound in 150-pound fiber drums are: 600 pounds or more, $1.40; 300 through 450 pounds, $1.43; and single drums, $1.45.

Shipments will be made from Port Newark, N. J., and Seal Beach, Cal.

USI Rosins Used to Make Striped Polyethylene Film

A polyethylene film with a permanent stripe design formed through extrusion, is being produced commercially by Borden Hively, Columbus, Ohio. The film is made from the "Petrothene" resins of US Industrial Chemicals Company, New York.

According to USI, a division of National Distillers & Chemical Corporation, the striped film opens new roads in the packaging field. The material is produced generally as a clear film with stripes of any single color. It is possible, however, USI adds, to construct a die to produce stripes of two alternating colors or even to obtain a three-color effect.

Allied Asphalt Moves

Allied Asphalt & Mineral Corporation has moved its offices from 217 Broadway New York, to a new building at 49 Water Mill lane, Great Neck, N.Y. The new phone number is HUnter 2-4100. The company's factory address continues to be Dunellen, N.J. Allied is a subsidiary of E. T. Trotter & Co.

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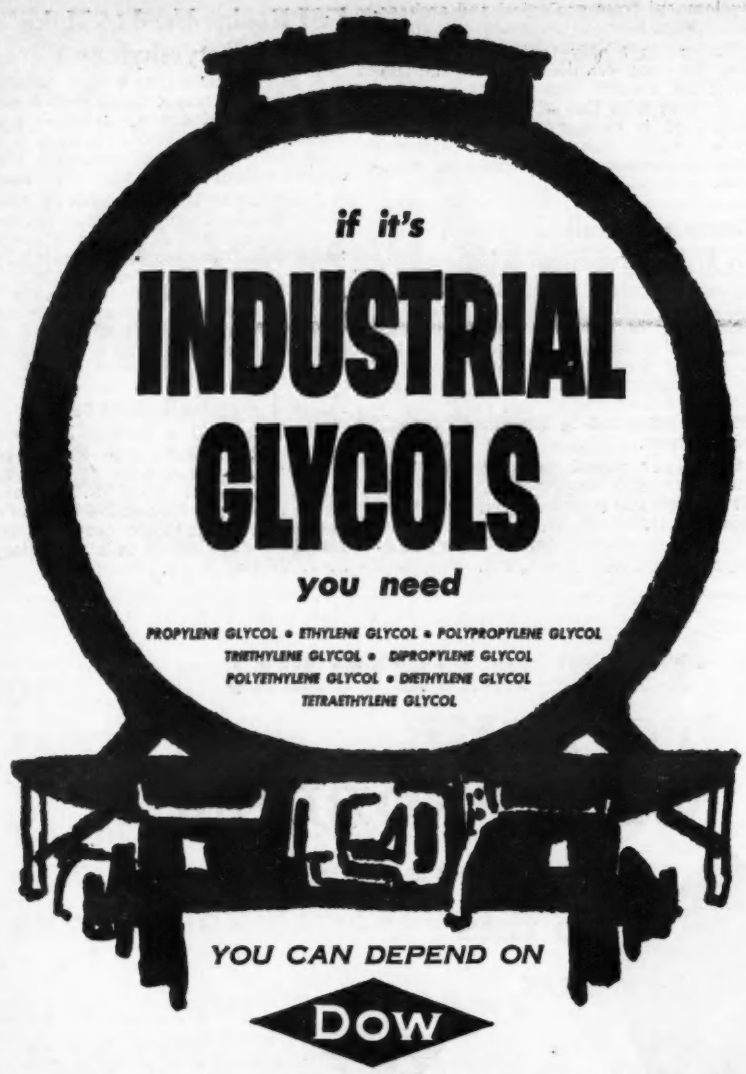

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Aliphatic Organics

Aliphatic price patterns, except for the few items shown in the box below, will hold firm in price as of October 1, and in the great majority of cases will not change during the fourth quarter. This price stability has been a characteristic feature of the aliphatic chemical market throughout the entire year. Part of the price stability has been due to the historically traditional policy of the synthetic organic chemical industry of not changing prices unless absolutely necessary. Part of it has been due to the fact that this year business volume has been off slightly leaving supplies plentiful and markets keenly competitive. In such a business climate manufacturers tend to absorb increasing costs as long as feasible, rather than make much needed upward adjustments.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Sept. 27, 1957
130.53	130.53	130.61	130.97

For Current Prices See Page 9

October 1 Price Advances

Denatured alcohol, 5c. to 8c. per gal.
Di-, tripentaerythritol, 4c. per lb.
Ethyl alcohol, 5c. per gal.
Isopropyl alcohol, 5c. per gal.
Monopentaerythritol, ½c. per lb.

Business volume during the Summer months proved to be substantially better than had been expected, and the outlook for the fourth quarter was for good business volume in practically all classes of aliphatic organic chemicals.

Acetophenone—Since the price of technical material was sharply reduced at the mid-year from 75 cents per pound in drums to 35 cents per pound in tankcars, with smaller quantities priced accordingly, there is economic opportunity for wider application and growth of end uses for this item.

Present or potential uses include such patterns as perfume fixatives, intermediate in the manufacture of such drugs as antihistamines, vasoconstrictors and treatments for Parkinson's disease, intermediate in the manufacture of synthetic resins, solvent uses, swelling agent for polyester fibers to assist dyeing, manufacture of tear gas, odormasking agents, and as a soporific or hypnotic.

Butyl Acetate—Solvent demand, while not strong, was better than had been expected all during the Summer. Fourth quarter prospects looked quite encouraging, and barring a strike in the automotive industry, were expected to be perhaps the best sales volume of the year. Supplies were said to be sufficient to take care of any demand that might develop.

Carbon Tetrachloride — Demand has quieted down after the normal heavy seasonal demand for clorofluorhydrocarbon refrigerant manufacture to be used in air conditioners. This being a seasonal but substantial fraction of the overall market, it is felt in sales volume when the season is over.

Other outlets, however, continued on a fairly even keel, and some uses were expected to show reasonable gains in the fourth quarter. Electrical refrigerator production which has felt the slump in hard goods industries looked more promising for 1959, and is expected to increase demand for the chloroflurohydrocarbon type refrigerants made from carbon tet.

Fire extinguisher business continued about the same, but the future pattern of fire extinguisher demand is being hurt by the fact that the Coast Guard soon will no longer approve new carbon tetrachloride fire extinguishers, dropping this type in favor of others. However, any boat having a carbon tet fire extinguisher may continue to use it aboard until 1962.

Diethanolamine—The synthetic detergent market continued to take a substantial quantity of this item, being by far the largest outlet for it. It also finds significant use as a surface active agent in the textile industry, and is used as a chemical intermediate in organic synthesis. Price levels of 24½ cents per pound in tankcars is expected to prevail over the balance of the year.

Diethyl Carbonate—This specialty solvent, as usual, moved in relatively small volume under a firm price pattern. Tankcars were priced at 45 cents per pound, drum carlots at 47½ cents, and less than carlot drum quantities at 48½ cents.

Diethylene Glycol Monobutyl Ether—This widely used ether solvent moved at 28¼ cents per pound in tankcars delivered in the East. The acetate was priced ½ cent per pound higher. In line with business volume generally, increased buying interest is looked for during the fourth quarter.

Diglycollic Acid—This item moved steadily into such channels as the manufacture of synthetic resins and plasticizers, and as a sequestering agent. Prices of 14 cents per pound packaged in bags for any quantity were quite stable and have been in effect over an extended period. No immediate price change was looked for in any quarter.

Ethyl Acetate—Both fermentation and synthetic esters were firm in price. Demand was reported as moderate and on the upgrade, with fourth quarter prospects likely to be the best sales volume of the year, provided that the current business recovery is not set back by some unforeseen factor. Actually, all during the summer, business volume held up better than was expected.

Ethyl Alcohol—Effective October 1, the new tax free price on 190 proof ethyl alcohol in tankcars delivered East of the Rocky Mountains will be 52c. per gallon.

Tankcar prices per gallon on certain specially denatured grades delivered East of the Rockies will be as follows: SD-1, 54½c.; SD-2B, 53c.; SD-3A, 52c.; SD-4, 53c.; SD-12A, 53c.; SD-17, 53c.; SD-23A, 54½c.; SD-23H, 55c.; SD-27B, 82½c.; SD-29, 53½c.; SD-30, 52c.; SD-32, 54c.; SD-35A, 55c.; SD-36, 52½c.; SD-37, 69c.; SD-39B, 59½c.; SD-39C, 55½c.; SD-40, 56c. Proprietary solvent will be priced at 56 cents per gallon, same basis.

Ethyl Amyl Ketone—This ketone solvent is finding important usage in the lacquer industry to give solvent systems proper balance with respect to evaporation rate curves. Its slower rate of leaving the film, and its high solvency tend to promote better leveling, less lacquer pinholing, bubbling, and subsequent cratering, and prompt blush resistance.

Current price patterns are expected to hold for the fourth quarter. Tankcars are quoted at 17½ cents per gallon drum carlots at 20 cents, and less than carlot drum quantities at 21 cents. Fourth quarter business volume pickup in the lacquer solvent field is expected to be substantial.

Glycerine—Total production of glycerine on a crude 100 percent basis for the first six months of this year amounted to 101,488,000 pounds, as against 120,643,000 pounds during the same period of last year, according to the American Association of Soap and Glycerine Producers. Meanwhile, disappearance for the first six months amounted to 113,547,000 pounds as against a disappearance for the first six months of last year of 123,292,000 pounds.

The excess of disappearance over production for the first six months amounted to 12,059,000 pounds, whereas last year the excess disappearance over production was only 2,649,000 pounds. This has had the effect of decreasing the current stock level to slightly in excess of a 90 day supply, and about the same supply level as prevailed in the first half of 1957. This is regarded as a more healthy situation than the high inventory levels that prevailed last January.

Hydroxyacetic Acid — While demand from the leather and the textile industry has not been more than fair this year, prices have been firm and stable for a long time on the 70 percent solution. Tankcars, f.o.b. Eastern plant, are still quoted at 7.3 cents per pound. Prices, ex warehouse in drums at Philadelphia and Chicago, are 11 cents per pound. This material is also used in the bright dipping of

copper, the electropolishing of stainless steel, and in electroplating.

Methyl Ethyl Ketone—Solvent demand for this ketone is definitely on the upgrade, but has not as yet received the full spurt expected when things are all cleared away for full production ahead in the automotive industry.

Feeling about Detroit is generally that labor negotiations will result in contracts without a strike since one of the big three has settled, and the other two may reach agreement without difficulty. Upon completion of such contracts, 1959 production models will swing into volume output with corresponding demand for solvents.

Price patterns, long established, were expected to hold for the fourth quarter. Supplies were quite adequate to take care of any and all demands that might develop, and this supply is backed up by ample production capacity.

Molasses—Markets for feeding cane molasses were steady during the week ended September 23, Agricultural Marketing Service said. Demand improved slightly in the midwest and northeastern states. Continued abundance of pastures and other cheap feeds prevented any substantial pick-up in the demand. Trade reports indicated that shipments of blackstrap molasses by barge from Gulf ports to midwest barge terminals were substantially larger than a week ago. Much of the improvement in volume of shipping was said to be due to the desire to build up inventories in the midwest river terminals prior to the onset of cold weather. At New Orleans, prices were unchanged at mostly 14c. per gallon. Price declines of ¼c. were noted at Cincinnati and Memphis, while Denver was unchanged to .6c. per gallon higher.

Pentaerythritols—Effective October 1, dipentaerythritol and tripentaerythritol will be advanced 4 cents per pound, bringing their new price schedules to 38 cents per pound in bag carlot quantities and 39c. in less than carlots.

The powdered grade of technical PE only will be advanced 2c. per pound making the carlot price 31½c. per pound instead of the former 29½ cents. Regular technical PE, however, remains at 29½c. per pound in carlots and 30½c. in less than carlot quantities.

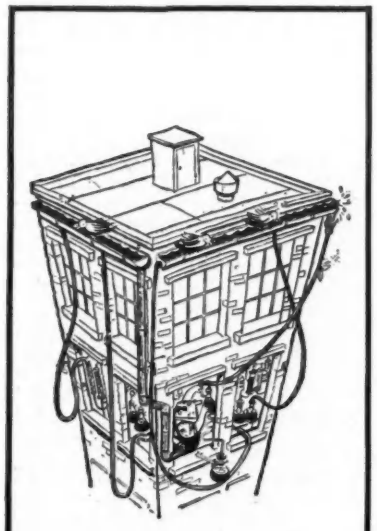
Monopentaerythritol, on October 1, will be advanced ½c. per pound making the price 30 cents per pound in carlot bag quantities, and 31c. for less than carlots or trucklots packaged in bags.

Propionic Acid—This material continued to move in tankcars at 20¾c. per pound, f.o.b. producing plant. On the same basis, drum carlots were priced at 23¼c. and less than carlot drum quantities at 24½c. per pound. This material is of high purity, synthetically produced, and manufacturing capacity is quite ample to take care of all needs.

Triethanolamine—Considerably more than half of the output of this item ends up in toilet preparations. It is a very excellent surface active agent and emulsifier, and as such gets into many cosmetic preparations. However, perhaps its largest usage in the toilet industry is by way of triethanolamine lauryl sulfate, which is the base of a wide variety of shampoos. Such volume usage stems not only from the fact that this salt is an excellent cleansing agent, but is essentially nonirritating to the eyes if it gets in them, hardly being any worse than water in this respect.

Textiles, waxes, polishes, and a whole host of other items take good advantage of its mild basic, emulsification, and surface tension depressing properties.

A well sustained market has been maintained on this item, which hardly felt the recent recession, and continues to move under previously established price patterns at good volume. No price adjustment was expected for the fourth quarter.



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Atlas Powder Marketing New Sorbitol Polyether

Atlas Powder Company is marketing a new low-cost polyether that it hopes will replace the more costly polyesters in rigid polyurethane foam manufacture.

The rigid foamed-plastic materials are becoming increasingly important as a strong filler in the new sandwich-type construction used in domestic and commercial refrigerators and freezers, refrigerated cars and trucks, boats, building panels and elsewhere, Atlas said.

The Wilmington, Del., firm's polyether is a derivative of low-cost sorbitol, and it has six hydrozyl groups available for cross-linking. Since rigid polyurethane foams can use up to 60 percent by weight of this new polyether, manufacturing costs can be reduced, Atlas added.

Oxygen Plant Is Slated By Linde Co. in Ohio

Linde Company, New York, a division of Union Carbide Corporation, will build and operate a 130-ton a day oxygen plant for the Middletown, Ohio, works of Armco Steel Corporation on property leased from Armco.

All of the oxygen from the unit will be high-purity gas, piped to various locations at Armco's Middletown works. A sizable volume of the oxygen is slated for enrichment of open-hearth furnace air. Steel conditioning, scrap cutting, maintenance, and other general steel mill requirements will take the balance of the gas.

Consultant Moves Offices

D. H. Killeffer, chemical public relations consultant, is moving his headquarters from Crestwood, Tuckahoe, N. Y., to 1033 Mohawk drive, Clearwater, Fla., and plans to establish his new office there about November 1.

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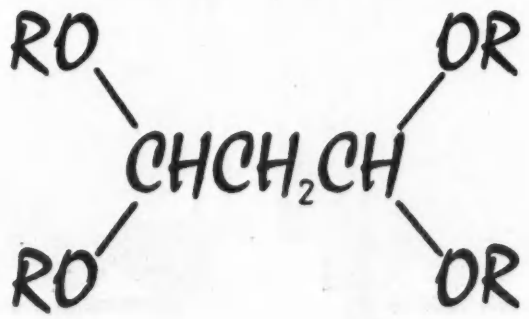

suggestions cross-linking agent; insolubilizing agent; substituted pyrimidine building block; usual dialdehyde reactions; pyrazole intermediate

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GSA Accepting Applications In Manganese Program Again

General Services Administration has resumed taking applications to participate in the government's domestic manganese purchase program. Applications will be received through December 31. The program terminates January 1, 1961, or when 28 million long dry ton units of manganese have been purchased, whichever happens first.

As of August 31, there were 8,034,175 ton units remaining to be purchased. Figuring deliveries continuing at current rates, the program should end late next year. Shipments from new participants and possible accelerated shipments by present participants could close out the program earlier, though.

Cyanamid to Pay Fees Due on Medicated Feeds

American Cyanamid Company, New York, has made arrangements with the Food and Drug Administration for the company to pay fees, nominally chargeable to its feed manufacturer customers under a new FDA regulation applying to feeds containing certifiable antibiotics in combination with new drugs.

Under the regulation, which went into effect on September 1, feed manufacturers must pay $5 for each medicated feed formula containing a certified antibiotic and a like amount for any changes affecting the new drug substances. The regulation does not apply to feeds containing non-certified antibiotics in combination with new drugs.

Fertilizer Output Hiked By Austrian Nitrogen Works

The Linz Nitrogen Works in Austria produced 369,000 tons of fertilizer during the first six months of this year, according to a report by the Austrian Information Service.

Superphosphate output totaled 53,000 tons as against 44,000 tons during the first half of 1957. A separate division, now operating three plants, produced 40,000 tons of sulphuric acid. This is 16,000 tons more than was produced a year ago, the report says.

Hercules Set to Exercise Option on Delaware Land

Hercules Powder Company has decided to exercise an option it holds on 1,800 acres of land along Delaware Bay, just north of Lewes, Del.

Albert E. Foster, president of the Wilmington, Del., firm said the company has no plans at present to build a plant on the site, but feels that the property provides it with an outstanding location for possible future expansion.

Diamond Advances Farkash

Frank Farkash has been promoted to the position of assistant plant manager of Diamond Alkali Company's sodium silicate plant at Jersey City, N.J. Mr. Farkash takes over his new duties following fourteen months as technical assistant to the manager of the Jersey City plant.

Jobs & People

E. I. duPont de Nemours & Co., Wilmington, Del.—**Oliver M. Hayden**, special assistant for sales for the newly-created elastomer chemicals department, has retired after thirty-two years with the company. Mr. Hayden, a nationally recognized authority in the rubber industry, was instrumental in working with both the automotive and rubber industries to adopt uniform specifications and tests.

Hooker Chemical Corporation, Niagara Falls, N.Y.—Three promotions have been made in the phosphorus division. **Edward J. Bissaillon**, recently appointed division engineer, has been named division assistant production manager; **Barrett B. Brown**, an assistant production superintendent at Hooker's Niagara Falls, N. Y., plant has been named technical manager for the phosphorus division whle **Charles D. Crosby**, formerly purchasing agent for the Columbia, Tenn., plant, has been named division purchasing manager.

Magnus, Mabee & Reynard, Inc., New York—**Robert B. Magnus, jr.**, assistant treasurer of the firm, has been elected to the board of directors of the Junior Chamber of Commerce and Young Men's Board of Trade of New York.

Mobey Chemical Company, New York—**Wallace P. Dunlap, jr.**, has been named production superintendent of the company's New Martinsville, W. Va., plant. Mr. Dunlap was formerly production superintendent of the Soda Springs, Idaho, plant of Monsanto Chemical Company.

Philipp Brothers Chemicals, Inc., New York—**Tom Morrison** has joined the sales department of the agricultural division. He is the son of **Kenneth D. Morrison**, vice-president of Philipp Brothers.

Roche Laboratories division of Hoffmann-La Roche, Inc., Nutley, N.J.—**Robert A. Handfield** has been appointed sales promotion manager for Roche Laboratories. In addition to his new duties, Mr. Handfeld will continue to direct the activities of the sales education department.

Tennessee Products & Chemical Corporation, Nashville, Tenn., a division of Merritt-Chapman & Scott Corporation—Three sales division managers have been named as part of an accelerated sales program. **Dr. E. Keith McMahon** has been named chemical sales division manager; **Howard B. Myers** has been named metallurgical sales division manager and **B. S. Howell, jr.**, has been named fuels and building materials sales division manager.

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Textile, Leather Chemicals

Consumers continued to take moderate lots of textile and leather chemicals for prompt needs last week. Slight improvement also was reported in the demand for later delivery. Chemicals were steady and quotably unchanged. An easier tone was prevailed in potato starch. Idaho producers reduced prices ½ cent per pound for delivery during the last quarter of the year. Maine starch was unchanged but prices were shadable on firm bids. Sales were reported at a fractional decline. Tapioca flour was inactive and offered freely from Siam and Brazil. Buying interest in tanning materials continued to lag.

Raw wool production in the free world in the 1958-59 season is expected to show a decline for the second season in succession, it was reported by the Commonwealth Economic Committee. The committee predicted a reduction of about 1 percent compared with 3 percent in 1957-58.

The 1958-59 total is placed at about 4,085 million pounds greasy basis, against a revised total of 4,115 million pounds in the previous season.

The decline is almost entirely due to the expected reduction of 3 percent in the Australian clip. South African production is expected to be down 1 percent.

Shoe output in August is estimated at 51.5 million pairs, by the National Shoe Manufacturers Association, a decrease of 6.3 percent from August, 1957, when 54,968,000 pairs were produced. The decline took place in all categories.

Based on manufacturer's schedules output for September was estimated at about 50 million pairs or 2 percent above last year's production of 48,800,000 pairs. This would bring the output for the first nine months of this year to 436,866,000 pairs compaired with total production of 454,686,000 pairs in 1957; 448,720,000 pairs, 1956 and 446,221,000 pairs, 1955.

Production of woolen and worsted fabric during the second quarter of 1958 totaled 71.8 million finished linear yards, 17 percent above the first quarter and approximately 11 percent below the comparable period of 1957, it was reported by the Census Bureau.

Output of women's and children's clothing fabrics at 38.6 million finished linear yards was 25 percent above the first quarter and 6 percent below the second quarter of 1957. Men's and boy's clothing fabric production increased 9 percent during the second quarter to 29.9 million finished linear yards.

Price Trends

Advanced
None

Reduced
Potato starch, mills, Maine, ¼c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Sept. 27, 1957
100.83	100.83	100.84	103.53

For Current Prices See Page 9

Chemicals

Bichromates—Steady movement was noted for delivery against current orders. All grades were unchanged and well held.

Hydrogen Peroxide—Moderate improvement was reported in demand for prompt needs. Prices were maintained at former levels.

Sodium Acetate—Spotty demand continued for immediate delivery. Quotations were unchanged and steady.

Sodium Hydrosulfite — Business was slightly better for actual requirements. Prices were without change and steady.

Sulfonated Oils—Fair volume of business was indicated for actual needs. All grades were quotably unchanged.

Sizing Materials

Albumin Egg—Trading was reported quite active for prompt requirements. Market steady. Flake was maintained from $1.05 to $1.09 per pound and powder, $1.09 to $1.13 per pound, according to quantity and seller. Technical ruled steady at $1.08 to $1.10 per pound, same basis.

Corn Dextrin—Routine demand continued for prompt delivery. All grades were maintained at current quotations. Gum was quoted to $9.40 per 100 pounds, paper bags, carlots, New York basis; dark canary, $9.24, light canary, $9.14 and white, $8.98, same basis. Less carlots were 15c. higher.

Corn-Starch—Consumers absorbed larger lots for spot delivery and against existing contracts. Prices were unchanged and well held. Pearl was quoted at $7.38 per 100 pounds, paper bags, carlots, New York basis and powder $7.50, same basis. Less carlots were 15c. higher. Visible corn supply declined 693,000 bushels to 72,702,000 bushels for the week ended September 19. This compared with 104,996,000 bushels for the corresponding week last year, it was reported by the Chicago Board of Trade.

Potato Starch—Prices of Idaho starch were announced at 5.8c. per pound, carlots, f.o.b. mills, for shipment during the fourth quarter of this year, effective October 1, and ½c. less for delivery to eastern points. This was ½c. per pound below previous quotations. Maine starch was unchanged, with new prices expected some time this week. Carlots were nominal at 6¼c. per pound, f.o.b. Maine, with sales reported thereat for nearby delivery. Trading was fair for spot delivery ranging from 8¼c. to 9¼c. per pound, exwarehouse, according to quantity.

Sago Flour—Steady tone prevailed due to improved trading for foreign account. Prompt shipment was maintained at 5¼c. per pound, carlots, exdock, prompt shipment. Spot stocks were quotably unchanged. Raw was quoted at 7¼c. to 7½c. per pound, exwarehouse and refined, 9c. to 9¼c., as to quantity.

Tapioca Flour—Offers for shipment were liberal, with buying interest limited for both Siamese and Brazilian grades. Siamese B grade was offered freely at 5.15c. per pound, carlots, exdock, prompt shipment and A grade at 5.35c., same basis. Trading in Brazilian continued inactive. B grade was available at 6.2c. per pound, carlots, exdock, prompt shipment and A, at 6½c., same basis.

Tanning Materials

Preliminary estimates indicate a decline in leather production in July except goat and kid skins compared with the previous month according to Tanners Council. Cattle hide and kip sides leathers output in July was placed at 1,651,000 hides and kips against 1,892,000 in June; calf and whole kip skins, 542,000 against 687,000; goat and whole kip skins, 1,808,000 against 1,682,000 and sheep and lamb skins, 1,908,000 against 2,114,000.

Chestnut Extract — Trading was restricted to nearby delivery. Solid extract, 60 percent tannin was named at 8.55c. per pound, carlots, exdock, prompt shipment and 68 percent powdered 9.69c., same basis.

Cutch—Consuming inquiry was light and spotty. Shipments were unchanged at 7½c. per pound, carlots, exdock, prompt shipment.

Mangrove Bark—Business was reported quiet. Shipments were unchanged. African bark was quoted at $67 to $68 per ton, exdock. Colombian was unchanged at $50 per ton, exdock and Ecuadorian, $47, same basis.

Myrobalans—Buying interest was limited to actual needs. Primary market was unchanged. Genuine J1's was quoted at $50 to $51 per ton, exdock, prompt shipment; crushed J1's, $65 to $66 per ton, and Bombay, $44 to $45, same basis.

Quebracho Extract—Trading was confined to an occasional lot for immediate shipment. Prices were unchanged. Solid clarified, 64 percent was held at 10.8713c. per pound, carlots, exdock, prompt shipment and solid ordinary at 9.9228c., same basis.

Valonia — Buying interest was slow. Prices were without change. Beards were quoted at $88 to $90 per ton, exdock; cups, at $66 to $67 per ton and extract, 11c. per pound, same basis.

Wattle—Shipments were maintained at former levels, despite slow demand. Fair average was quoted at $68 per ton, exdock, prompt shipment and merchantable, $64, same basis. Extract was unchanged. African 60 percent was held at 8.275c. per pound, and South African at 8.4c., carlots, exdock, prompt shipment.

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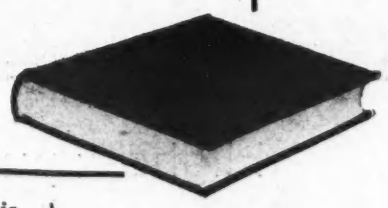

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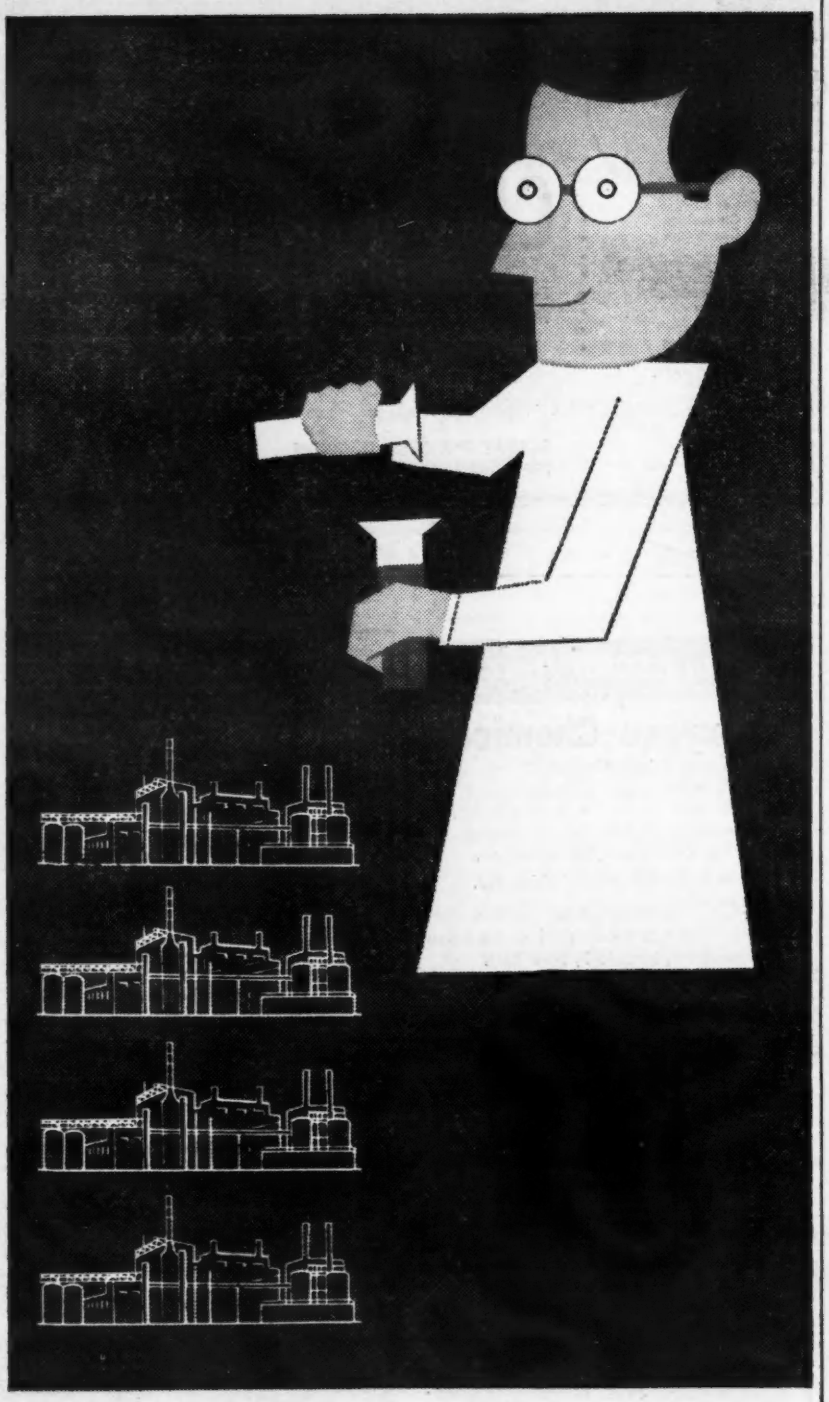

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Coal Chemicals

Materials scheduled for price advances on Wednesday include technical styrene monomer, cyclohexanol and cyclohexanone. Monomer will be boosted 5/100 cent per pound, while the solvents will be advanced 2 cents per pound across the board. In addition, the latter materials will be made available for the first time in tankwagon lots of 2,000 gallons minimum at ½ cent per pound over the tankcar listing. Shipments to the Far West will be 1½ cents per pound more. No other price advances for the final quarter have been reported by coal chemicals sources. Prices on g-picoline were steady after a 40 cent decline two weeks ago in the truckload price to $1.60 per pound. A tankcar price of $1.50 per pound on this material was established at the same time. Other producers in the trade had reported no price moves on g-picoline last week, but it was felt to be axiomatic that competition would be met. New prices on coaltar high-flash solvent naphtha were established. The move had been expected as a result of reductions in competitive solvents in the petroleum field two weeks ago.

Import naphthalene sources have reported added buying on the part of large consumers and some naphthalene producers for storage purposes. This does not mean a stronger market, it was said, since material overbought now for price advantage will have to be worked off before there is a genuine improvement. Price on import material was about 4¼ cents per pound. The phthalic market continued to forge ahead. The announcement that major producers would meet a 17 cent phthalic price has given rise to confidence on the part of consumers and buying was no more cautious than has been the case for many months past, it was said.

October 1 Price Advances

Cyclohexanol, 2c. per lb.
Cyclohexanone, 2c. per lb.
Styrene monomer, tech., 5/100c. per lb.

Light oil markets were unchanged and steady. An easing of labor tensions in the auto industry together with the continued rise in steel orders from automotive consumers were factors leading to optimistic reports in chemical coke-oven by-products markets.

American Iron and Steel Institute estimated that steel production in the week ended September 28 would amount to 66.4 percent of theoretical capacity equivalent to 1,793,000 net tons of steel. Output of steel was 1,771,000 net tons in the week previous, 1,715,000 in the comparable week one month ago and 2,105,000 tons in the corresponding week one year ago.

Basic Products

Benzene—Market continued to improve, although sources cautioned there was no evidence of a sharp upturn in consumption. The improvement was felt to be more a result of an upturn in the overall economy.

Steel rate continues to edge upward. Orders from machine tool makers have increased and automotive buying of steel this quarter has been stepped up. An easing of labor tensions in the auto industry has helped to brighten the picture.

Bureau of Mines reported cokeoven production of benzene in July at 8.1 million gallons, while sales totaled 8 million and end of month stocks were 11 million gallons. The figures compare with production in the comparable month last year of 13.7 million gallons, sales of 13.5 million and stocks of 5.9 million gallons.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending September 28, was as follows:

Ammonia liquor	lbs.	329,184
Ammonium sulfate	lbs.	29,011,056
Benzene	gals.	2,369,354
Coaltar	gals.	13,911,685
Crude chemical oil	gals.	364,549
Solvent naphtha, crude, heavy solvent	gals.	94,077
Toluene	gals.	611,501
Xylene	gals.	176,403

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Sept. 27, 1957
118.53	118.53	118.58	118.18

For Current Prices see page 9

Price was unchanged at 31c. per gallon at major shipping points.

Naphthalene — Import sources quoted naphthalene at 4¼c. per pound. There was said to have been added buying for storage in recent weeks on the part of large consumers and some naphthalene producers. This does not necessarily mean a stronger market, since material overbought now for price advantage will have to be worked off before there can be a genuine improvement. Storage in some quarters has been estimated as high as 23,000 tons.

Solvent Naphtha—New prices were reported on coaltar high-flash solvent naphtha. Delivered price in tanks or transports was quoted in a range of 30c. to 35½c. per gallon, depending on shipping point. Reductions at the various points averaged about 3c. per gallon, it was said.

The move came as a result of reductions of 3c. to 4½c. per gallon on high-flash aromatic solvents in the petroleum industry two weeks ago. Materials move into coatings markets, but do not compete with xylene as they are largely used as specialties and are in a higher boiling range.

Tar Acids—Opinions in the trade were sharply divergent in these markets. Some sources have reported good movement and a distinct improvement in recent weeks over reports of the first of the year. Other major producers were less optimistic and said they had experienced no clear improvement in natural tar acid markets. It was generally agreed that natural phenol volume has been well sustained. Prices were unchanged from levels established in the trade for the past year.

Toluene — Withdrawals remained routine, according to cokeoven operators reports last week. Stocks were fully adequate for trade requirements. Price was unchanged from previous report.

Bureau of Mines report for July indicated cokeoven production of toluene during the month amounted to 2.6 million gallons, while sales were 2.4 million and end of month stocks amounted to 4.7 million gallons. Production in the comparable month last year was 3.8 million gallons compared with sales of 3.6 million and end of month stock amounting to 3.6 million gallons.

Xylene—Market was quiet. Sources said the reductions of two weeks ago in some high flash aromatic petroleum solvents could have no effect in this market. It was pointed out that although these solvents and xylene move into the same market areas, they are not used interchangeably.

Xylene schedules of cokeoven operators were unchanged and price was being quoted at 29c. per gallon at most major shipping points.

Intermediates

Acetanilide — Sources reported no changes in prices for technical or pharmaceutical material. Last change in these markets was a 2c. per pound across the board increase on technical acetanilide effected January 1.

Census bureau reported imports in June amounted to 425,807 pounds of technical acetanilide.

Cyclohexanol—Market for this solvent, as well as for cyclohexanone, has been more active in the past ten days as some consumers were stocking to beat a 2c. per pound across the board increase scheduled for this Wednesday.

Coal Chemicals

New schedules will list cyclohexanol at 26c. per pound in tanks, 28½c. in carload or truckload, and 29½c. per pound in drum lots. Cyclohexanone will be 31c. per pound in tanks, while carload or truckload will be 34½c. and less carload lots will be 37c. per pound. Shipments to the far West will be 1½c. per pound more across the schedule.

The changes were initiated by a major producer three weeks ago. At the same time, it was pointed out that tankwagons of 2,000 gallons minimum would be made available from dealers' stocks for the first time at only ½c. per pound over the tankcar listing.

Nitrobenzene—Market was steady and unchanged from previous report. Withdrawals for use in the production of aniline were steady and a mild upturn has been evident in recent weeks, it was said. Stocks were fully adequate for requirements.

Price in tankcar or tanktruck was 11c. per pound, while carload and truckload quotation was 13c. and less truckload was 14c. per pound.

Styrene Monomer — Technical material in use by rubbermakers was scheduled to be advanced 5/100 cents per pound across the board this Wednesday. New price on tankcar lots will be 12.67c. per pound, while carload or truckload of drums will be 15.17c. and less than carload or truckload in drums will be 17.17c. per pound. Polymer grade styrene remains unchanged at 14½c. per pound in tanks, 17c. in carload, and 19c. per pound, l.c.l.

Improvement in demand from rubber companies has led to a fair upturn in styrene movement during the past two months.

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Cresols, Cresylic Acid Makers Aim at '65 Target: Sales of 190 Million Pounds

OPD Special Report on Cresols, Cresylic Acid

—*Continued from page 3*

"We have learned through our continuous economic analyses of our coal processing research that commercially it must be done on a very large scale to be attractive economically."

• Cresols and cresylic acid, with a supply history clouded by short positions in recent years, are now plentiful. But consumers tend to shy away from these materials due to painful memories of the past.

These days, with retrenchment the order of the day and caution the password, cresylics producers are building for the future very conservatively.

Rather than predict how good business will be a few years hence, the industry is taking a close look at two major problems staring it in the face right now: More exact identification of cresylic compounds and consumer education.

Need for Better Identification

• There is an increasing desire for a better system of identification of cresylic compounds. Everybody concedes that the present method of classification by boiling ranges is antiquated.

Why? Because there is a continual search for more highly purified compounds to use as chemical building blocks. Work is being pushed now on identification through gas chromatography and infra-red spectrometry.

• The problem of consumer education is twofold. First, producers have to drum the idea into buyers' heads that there is plenty of material around for use as a chemical building block, and that there won't be any recurrence of tight supplies.

At times in the past, for instance, m,p-cresol has been short. Buyers have been in no position to experiment with it as a chemical raw material, not wishing to get into a position where short stocks would hamper finished goods production.

The second problem in consumer education stems from the first, and, in fact, from the problem of accurate identification of compounds as well. Customers want to be assured of material of maximum purity, if they're going to make intermediates with it.

This can be quite a headache. As James H. Carpenter, formerly with Koppers Company, Pittsburgh, Pa., and now with the chemical and rubber division of Business and Defense Services Administration, explains it:

"Forty different tar acids have been found in coaltar, and petroleum distillates probably contain others more complicated chemically. Nine of the twenty found in coaltar boiling below 230 degrees Centigrade are the important ones of commerce, although some higher-boiling ones have limited industrial uses.

Most Widely Used Tar Acids

"The nine most widely utilized acids are phenol, boiling at 181.4 dgrees C.; o-cresol, boiling at 190.8 degrees C.; m- and p-cresols, boiling at 202.8 degrees and 202.3 degrees respectively; 2,5-xylenol and 2,4-xylenol, each boiling at 211.5 degrees; 2,3-xylenol, boiling point 218 degrees; 3,5-xylenol, at 219.5 degrees, and 3,4-xylenol, at 225 degrees."

To add to this potpourri, Mr. Carpenter points out, "There are eleven other acids boiling below 230 degrees Centigrade found in coaltar, including 2,6-xylenol, ethyl and propyl phenols and ethyl cresols." But, he adds, "none boil below 204 degrees."

ADF ACID IMPORTS

1958 . . .	*13.8 million lbs.
1957 . . .	19.8 million lbs.
1956 . . .	26.0 million lbs.
1955 . . .	14.2 million lbs.
1954 . . .	11.5 million lbs.
1949 . . .	10.7 million lbs.
1948 . . .	24.0 million lbs.

*Industry Estimate

Source: Tariff Commission

It is the industry's job to separate and identify compounds more accurately, everybody feels. The next logical step is a harder one: Produce them as separate compounds.

The feeling that this work must be done is strong in many segments of the industry. Belief is general that the most promising end-uses of the future will lie in chemical fields, rather than in such applications as ore flotation, wire enamel solvent, disinfectants and similar end-uses.

But opinion is divided among coaltar and petroleum producers as to the amount of research work that needs to be done, as well as how soon. Actually, the difference between the two segments is a difference in the degree of enthusiasm.

While coaltar producers of cresylics would like to see the dawning of a new, chemically pure era, they haven't, in the main, committed themselves to anything like crash research programs.

There are five coaltar producers of cresols in this country, with a combined capacity of 91 million pounds annually. They are:

• Allied Chemical Corporation, New York, with a plant at Frankford, Pa.

• Koppers Company, Pittsburgh, Pa., with production at Follansbee, W. Va.

• United States Steel Corporation, at Clairton, Pa.

• Pittsburgh Coke & Chemical Company, Pittsburgh, Pa.

• Reilly Tar & Chemical Corporation, Indianapolis, Ind., with a plant at Chicago.

Why haven't the tar distillers moved ahead with the enthusiasm displayed by their petroleum counterparts?

Why Tar Distillers Go Slow

One reason is that coal is never coked for tar or other byproducts. It is always coked for either the coke itself or gas. Tar acids from tar are obtained by treating a middle-oil cut in tar distillation; or, where residual tar is used as fuel, with caustic soda, separating from the oil the layer of sodium cresylate thus formed.

Another method is to remove phenol and cresol from waste ammoniacal liquors after removal of ammonium sulfate.

But, while the percentage of cresols and cresylic acid production varies with coals used, and with temperature and coking time in the same ovens, the coaltar industry knows that it's going to have a certain amount of cresol to peddle, regardless of these varying factors.

One spokesman sums up the general feeling: "We know we're going to get so much cresol off, and that we're going to have to sell it one way or the other. We've got more important products to deal with."

Then, too, there is always the problem of availability of tar for distillation. Suppose there should be a steel strike: The supply of tar available for distillation would be cut down.

Future of Cokeovens a Factor

Another factor has to do with the future of cokeovens themselves. While more ovens will be built as steel output expands and old ovens wear out, there is always the probability of using more oxygen in iron or smelting. This means a reduction in the amount of coke needed.

Hence, tar distillers can hardly hope for large increases in this country from high temperature coking in the future.

Therefore, the fact that coaltar cresylic producers must dispose of a certain amount of cresylics regardless of business conditions, added to the possibility of an uncertain future raw material position, dampens any real all-out effort to boom cresylics on the part of the coal chemicals industry.

Who stands to gain over the next several years if the coaltar producers find themselves tethered to dwindling cresol raw material supplies?

Admittedly, it is the petroleum cresylic producers who are trying to forge ahead. They don't believe they'll have to worry about the amount of raw material available to them for cresylic production in the future.

Who Petroleum Cresylics Makers Are

Petroleum cresylic producers operate using refinery waste. The question seems not to be "how much is available?" but, "how much do you need?"

Here is an OPD estimate of capacities of petroleum cresylics producers:

• Pitt-Consol, with a continuous-extraction process plant at Newark, N.J., capable of making up to 25 million pounds a year.

• Merichem Company, Houston, Tex., a subsidiary of Jefferson Lake Sulphur Company, which has recently expanded its Houston plant to a 21.6 million-pound-a-year capacity.

• Productol Company, Los Angeles, with a plant at Santa Fe Springs, Calif., able to produce around 10 million pounds a year.

• Shell Chemical Corporation, New York, having a capacity of 4.8 million pounds a year at its Wilmington, Calif., producing location.

• Magnolia Petroleum Company, Dallas, Tex., an affiliate of Socony Mobil Oil Company, which has a plant at Beaumont, Tex., with a capacity of about 3 million pounds annually.

• Oronite Chemical Company, Richmond, Calif., a subsidiary of Standard Oil Company of California, which is currently out of the merchant market, but is still supplying a limited amount of material on long-term contracts.

Admittedly, petroleum producers would like to turn out material of higher quality, because that's what customers want. Pitt-Consol, using a process at its Newark plant which was originally designed for upgrading liquids from low-temperature carbonization of coal, appears to have made the biggest advances toward high-purity, uniform end-products.

The company had hoped to use the same process on a 40-million-pound-a-year scale at its now-deferred Cresap, W. Va., operation. Plans had been to recover cresylics from liquids derived from 3 to 5 million tons of coal a year.

With each ton of coal yielding from twenty-six to thirty gallons of liquids, from which 50 to 60 million gallons of refined liquids a year would be derived, Pitt-Consol concedes it would have been a problem.

"Five million gallons, or about 45 million pounds of material," said Pitt-Consol in 1956, "is a lot of stuff in the chemical industry, but it's less than 10 percent of our output."

What about the future of low temperature coal carbonization as a raw material base for cresylics. Pitt-Consol believes it's feasible, but that present market conditions don't warrant it.

Mr. Carpenter predicts that the large potential for the future for cresols is the hydrogenation of coal. But, he adds, the necessary tremendous investment may not be undertaken until a real shortage of petroleum fuel develops.

Carbide Gives Up on Coal Hydrogenation

(Union Carbide Corporation, New York, recently gave up on a coal hydrogenation plant after having spent several years and several million dollars in development.)

He warns that such a process could never be considered for its tar acid production alone, although yield per ton of coal is said to be many times as much as from high temperature coking.

In this respect, Pitt-Consol's plans for Cresap called not only for tar acid pro-

CRESOLS AND CRESYLIC ACID: 1958 CAPACITY

How Coaltar and Petroleum Rank as Source Materials

		From Coaltar (Pounds)	From Petroleum Annually)
Allied	Frankford, Pa.	91.0 million	. . . . .
Koppers	Follansbee, W. Va.		. . . . .
Pittsburgh Coke	Pittsburgh, Pa.		. . . . .
Reilly Tar	Chicago, Ill.		. . . . .
US Steel	Clairton, Pa.		. . . . .
Magnolia	Beaumont, Tex.	. . . . .	3.0 million
Merichem	Houston, Tex.	. . . . .	21.6 million
Oronite	Richmond, Calif.	. . . . .	*
Pitt-Consol	Newark, N. J.	. . . . .	25.0 million
Productol	Santa Fe Springs, Calif.	. . . . .	10.0 million
Shell	Wilmington, Calif.	. . . . .	4.8 million
		91.0 million	64.0 million

Total . . . . . 155.4 million

*Oronite has no merchant capacity at Richmond.

Sherwin-Williams operates a synthetic p-cresol plant at Chicago, with an annual capacity of 10 million pounds.

Hercules has a similar installation at Gibbstown, N. J., with a yearly capacity of 6 million pounds.

OPD Special Report on Cresols, Cresylic Acid

duction, but for furnishing char to a power station nearby, as well as material for a carbon black plant.

How do the importers fit into the cresylics picture? They were naturally concerned when the Cresap plans were announced, and relieved when they were tabled.

"But nobody's going to drive us out of the American market," one spokesman for the importers maintains. He cites the wide flexibility of overseas producers, pointing out that they are able to chop prices to almost any level to combat any broad-scale attempt by cresylics producers here to squeeze ADF (American Duty Free) acid out of the market.

ADF acid imports this year should decline to 13.8 million pounds, according to one importer. This is quite a slump from last year's 19.8 million pounds.

But the importers stress that they haven't lost this amount of business to domestic producers. They blame the slump strictly on the recession. They concede that there has been a bit of price shading, however.

"Imports should hold between 1.6 and 2.5 million gallons annually," an ADF seller here believes. He doesn't see any unusual rise or decline in imports beyond that margin during the next several years.

Proving the point that foreign producers have snappy elasticity in pricing, an importer points out that during the past ten years ADF prices have been as low as 50 cents a gallon and as high as $1.65.

Interested in Reprints?

Reprints of this "in-depth" study on cresols and cresylic acid as well as others in the OPD series are available at 35 cents a copy. Quantity discounts are given. Still in print are these previous articles: Sodium bicarbonate, hydrofluoric acid, acrylonitrile, methanol and titanium pigment. Address all requests to OIL, PAINT AND DRUG REPORTER'S Reprint Department, 30 Church street, New York 7.

"And we'll drop our price to retain our share of the market, if we have to," he says. The same source believes that if the present recovery holds, the end of 1959 may see a price reduction on ADF acid.

While importers won't say exactly how much of their acid goes where, they admit that the bulk of it probably goes into wire enamel solvent uses.

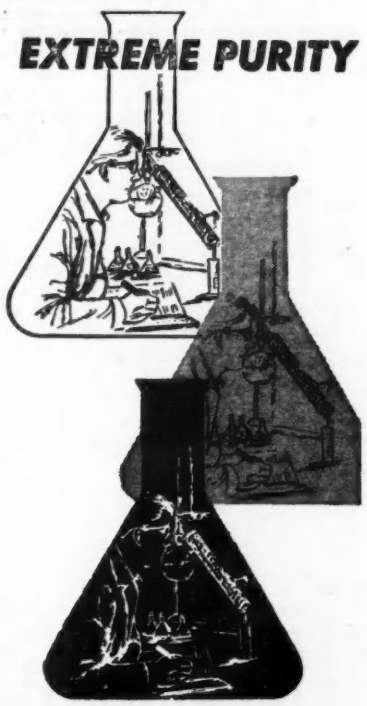
Phenolic resins appear to run a close second. Ore flotation takes a goodly amount. Engine cleaners use about 10 percent of imported ADF acid. There is a plethora of other end-uses as well.

A word about engine cleaners: Cresylic acid sellers, both foreign and domestic, look for a steady decline in consumption. This is due to replacement of piston engines by jet turbines on both civilian and military aircraft, where the bulk of cresylic-based engine cleaners goes.

A quick look through the end-use pattern shows that there are other applications beside engine cleaners which can be expected to remain static or lose ground.

Phenolics, wire enamel solvent, disin-

—Continued on page 57



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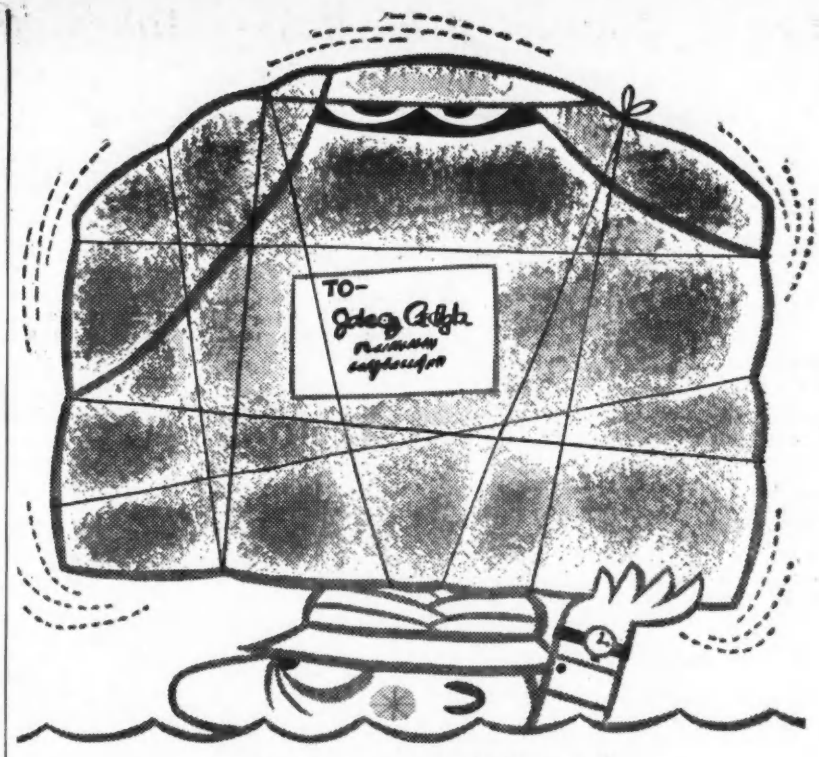

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Drugs, Fine Chemicals

The major producer of domestic crude iodine announced that crystalline USP potassium iodide would be offered at $1.40 per pound in 600-lb. lots or more. Other sources in the industry contacted last week said they would remain competitive. USP material finds use in pharmaceutical outlets as well as in feed mixtures. No other price revisions were reported in drug and fine chemicals markets last week.

A court decision in the District of Columbia, ruling that aspirin is a patent medicine, may open the way to establishment of new retail outlets for the material. Since many states have rules similar to those of the District of Columbia relating to the sale of drugs, it was felt that the decision could have national significance. Aspirin could be sold in grocery stores and other retail outlets without supervision by a pharmacist.

A domestic producer recently announced plans to build a $2 million plant for the production of synthetic l-menthol. The unit would enable the producer to supply 40 percent of domestic needs, it was said. Increased use of menthol in cigarettes and sustained pharmaceutical demand were among the factors prompting the move.

Sulfonamides markets were steady after a 40 cents per pound reduction in the price of sodium sulfathiazole two weeks ago. Sulfadiazine was uneffected by the change in the sodium salt.

A major pharmaceutical producer announced clinical success with a sulfonylurea compound generically termed chlorpropamide, used as an oral antidiabetic. Tolbutamide, the first of these compounds to be marketed, was felt to have provided medicine with a powerful tool in controlling diabetes cases where onset occurs after the age of thirty. Tests with carbutamide, a sulfonamide, were suspended in late 1956 as large-scale clinical tests revealed serious side reactions in about five percent of cases.

Sources reported a little more activity in industrial outlets for tartrates. Movement has been sluggish for many weeks. Prices were unchanged from levels in effect for over two years.

Price Trends

Advanced

None

Reduced

Potassium iodide, USP, cryst. or gran., 3c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Sept. 27, 1957
62.60	62.60	62.79	63.22

For Current Prices see page 9

By presstime, at least one other producer had announced new prices and other sources contacted said they would "remain competitive." Last price change in this market occurred in May of this year when potassium iodide declined 47c. per pound along with substantial reductions in other iodide salts.

The new source offered USP crystalline potassium iodide in 600-pound lots or more at $1.40 per pound. Lots of 300 through 450 pounds listed at $1.43 and a single 150-pound drum was $1.45 per pound.

Another source broke down prices this way: USP crystalline potassium iodide, 500-pound lots, in 250 or 100-pound fiber drums, $1.40 per pound; 200-250 pound lots, $1.43 and a single 100-pound drum, $1.45 per pound. In this quarter, granular USP KI was offered in 700 pound lots or more, 350 and 100 pound containers, $1.40 per pound, 200 to 350 pounds was $1.43 and a single 100 pound drum, $1.45.

Quinine Sulfate—Dealers reported good advance inquiry for October requirements. Volume of quinine salts moving to pharmaceutical makers of analgesic and antipyretic products has been seasonally more active in recent weeks. Price listings were unchanged from previous report. Quinine sulfate in 1000-ounce quantity, in drums, was quoted at 27½c per ounce. Same quantity in tins was 28c per ounce.

Streptomycin—Sources have continued to report steady improvement in antibiotics markets this month. Producers listed prices were unchanged from levels in effect for many months.

Export of all forms of streptomycin in June amounted to 2,869,528 grams as against 3,427,268 grams in the previous month. Exports in the first six months of the year amounted to approximately 20 million grams, while domestic production, bulk only, was 45.6 million grams.

Export of dihydrostreptomycin, bulk only, was 48 million grams in the six month period and domestic production of bulk material during that time totaled 133 million grams.

Sulfonamides—Markets were quiet after a 40c. per pound reduction in the price of NF sodium sulfathiazole two weeks ago. Under the new schedules, material listed at $2.35 per pound in 1,000-pound lots or more, while 500-pound quantity was $2.45 and a minimum shipment of 25 pounds was quoted at $2.75 per pound. Prices of NF sulfathiazole were unaffected by the change in sodium salt.

Census bureau reported exports of sulfonamides in June amounted to 51,519 pounds as compared to 61,071 pounds in the previous month. Exports in the first six months of this year totaled 376,544 pounds, while production of bulk material during that period was 1,825,139 pounds.

Sulfonylureas—A major pharmaceutical producer reported successful clinical tests in recent months with a sulfonylurea generically termed chlorpropamide, used as an oral anti-diabetic. The first of these compounds to be marketed was tolbutamide, which proved successful in controlling a good percentage of diabetes cases where onset occurs after the age of thirty.

Tranquilizers — Tariff Commission reported output of 468,000 pounds in 1956, while production last year was 964,000 pounds, approximately a 50 percent increase.

Consumption continues on the increase as a result of added concentration on mental health by researchers in recent years. A growing field for tranquilizers is reported in the veterinary field. Shrinkage of beef during shipment is said to be mini-

Aspirin—Market continued to forge ahead, according to report of basic suppliers contacted last week. Report from the Surgeon General's office has indicated that flu cases may be expected this fall, but not in the epidemic proportions of last year. "Special risk" cases have been advised to seek vaccination with polyvalent vaccine.

A court decision in the District of Columbia two weeks ago may open the way to establishing new retail outlets for aspirin, it was said. The court ruled that aspirin is a patent medicine and may be sold in grocery stores and other outlets without the supervision of a pharmacist. Many other states are said to have laws similar to the District of Columbia relating to sales of drugs and this would give the decision national significance.

Bioflavonoids—Prices long in effect in these markets remained unchanged from previous report. Hesperidin, purified, listed at $8.95 per pound in 100-lb. fiber drums. Naringin, the bitter principle of grapefruit, was quoted at $8.50 per pound in 50-pound drums.

Caffeine—Census bureau reported imports of caffeine in June amounted to 58,500 pounds. Of the total, 56,000 pounds came from West Germany valued at $118,044 for a per pound value of $2.11. Imports from the Netherlands during the month amounted to 2,500 pounds valued at $2.65 per pound. Imports in the first six months of the year totaled 384,165 pounds.

Citric Acid—Demand continued to decline seasonally, according to report of trade sources contacted last week. Movement to the beverage industry has been well maintained this year, but with cooler weather, sources said they had experienced the normal downtrend in sales volume. Prices were unchanged and steady at levels in effect in the trade for many months.

Potassium Iodide—The major producer of domestic crude iodine broke into this market with a price of $1.40 per pound quoted on USP crystalline material. This represents a 3c. per pound drop from the $1.43 price that had been quoted by other producers.

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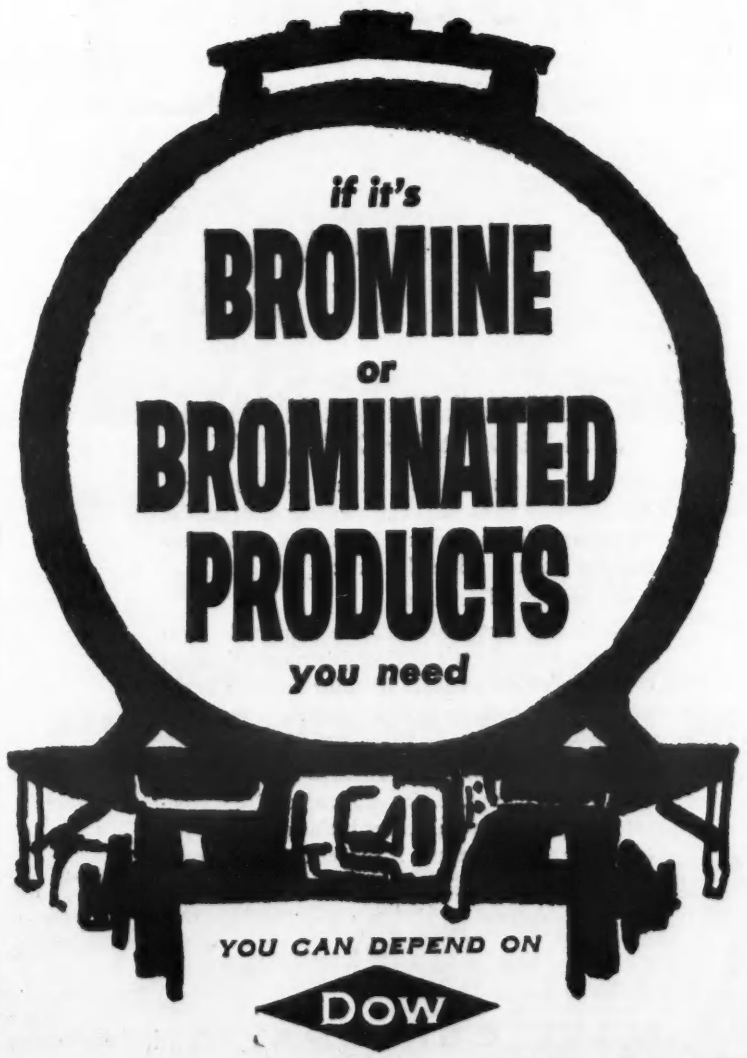

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Vitamins—Prices held unchanged from previous quotations. Sources contacted last week said demand was holding steady. It was felt that there had been no particular upsurge in demand during the past month, but a seasonal uptrend in activity was more noticeable after Labor Day, it was said.

Botanicals

Trading in crude drugs was maintained in moderate volume last week. Although there has been some improvement in inquiry this month over last, trade sources said sales volume still leaves much to be desired. Domestic botanicals appeared in better shape than import items. In the latter area, shortages have pushed prices higher causing some consumers to withdraw from the market.

Department of Agriculture researchers have produced a new polysaccharide gum by fermentation in a dextrose medium, according to a report issued at the 134th national ACS meeting this month. The product was identified as phosphorylated mannan and was said to have properties similar to natural gums from plant sources. It was felt that the development might open the way for fermentation conversion of starches to similar gums.

Cascara Segrada—Listing was unchanged and steady at prevailing levels, according to report of dealers contacted last week. Market has shown some improvement this month over last, it was said. Collections this year have been accounted "normal" and fully adequate for trade requirements. Export market has been weak as a result of exchange difficulties rather than through any slackening in demand.

Mandrake Root—Market continued to ease as dealers were reported anxious to move material on hand. Collections this year have been below normal, according to report from the country, but sources here said demand has not been up to par either. It was felt that harvests were adequate to cover the modest needs made in the trade. Price was quoted in a range of 48c. to 50c. per pound.

Antibiotics Regulations Are Amended by FDA

The antibiotic regulations were amended last week by the Food and Drug Administration to provide for the certification of tetracycline hydrochloride-neomycin spray ointment for topical use. The preparation is to be labeled with the certification period of 24 months.

Provision was also made for certification of tetracycline-triacetyloleandomycin for oral suspension. This is a dry powder which, when reconstituted with a diluent, must conform to the standards prescribed for the preparation in syrup form.

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OPD Special Report on Cresols, Cresylic Acid

—*Continued from page 53*

fectants and ore flotation don't appear too lively, either now or during the next few years TCP-type esters are expected to expand considerably with needs, both civilian and military, for more functional fluids of various kinds.

A fly in the ointment where these esters are concerned could be a decrease in the amount of functional fluids needed in autos, for instance.

Hence, producers are concentrating on new chemical end-uses. One thing cresylics manufacturers would like to achieve is the economical separation of meta and para isomers in m,p-cresol.

The only p-cresol available now in large volume is produced synthetically, and it is comparatively expensive. If the meta and para isomers can be economically separated, producers contend, a real breakthrough would be achieved.

Right now, Sherwin-Williams Company makes synthetic p-cresol at Chicago, and Hercules Powder Company makes it at Gibbstown, N.J. Other companies, including American Cyanamid Company, New York, are interested, but the feeling is strong that current capacity is far in excess of needs.

Right now a big use for synthetic p-cresol is 6-tert-butyl-p-cresol (butylated hydroxytoluene). An expanding market is in the production of anisaldehyde.

In regard to 2-tert-butyl-p-cresol, Hercules points out that it is expanding rapidly as an antioxidant in the petroleum industry and in the animal food industry. Poultry feed applications in particular show good possibilities.

With current cresylics capacity in general far in excess of sales, feeling is strong that producers must look to higher purity, more uniform standards and heavier research expenditures to broaden these tar acids' foothold in the chemical manufacturing field.

Perhaps the chief obstacle to be overcome, however, is the reluctant consumer. One producer sums it up this way: "We have to convince people that cresylics are here to stay, that they can be produced in quality and that there is plenty of material on hand."

Toilet Goods Industry Seen Depression-Proof

The toilet goods industry is "substantially depression-proof," says S. L. Mayham, executive vice-president of the Toilet Goods Association.

The reason for this is the American woman, Mr. Mayham observed last week in an address to a group of toilet goods buyers and merchandise managers in New York.

When business is in a slump and the head of the house is worried, his wife is "more inclined to pep herself up a bit by perhaps putting on her lipstick before breakfast and dolling herself up when the weary old man comes home," said Mr. Mayham.

During a real depression, but not so much during a recession, a woman is likely to take a job to supplement the family income, and will use more cosmetics because of her increased contacts with the public, Mr. Mayham concluded.

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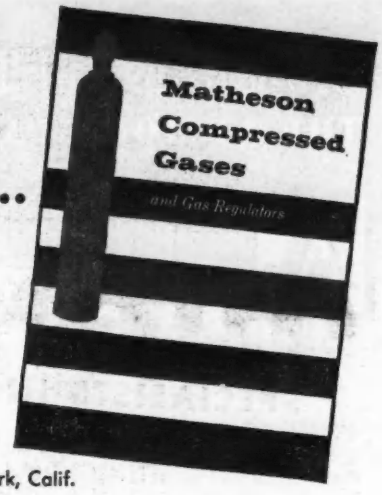

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Antara Chemicals Sales Division of General Aniline & Film Corporation, New York, has published a sixteen-page booklet on the properties and uses of its "Igepon" series of **anionic surfactants.** The company's brochure describes the chemical derivation of "Igepon" and gives the chemical formula, functional properties and uses of each of the brands. Copies are available by writing to Antara Chemicals, 435 Hudson street, New York, 14, N.Y.

Jefferson Chemical Company, Houston, Tex., has issued a forty-page technical bulletin on **mono-, di-, tri-, and tetra-ethylene glycol.** According to Jefferson, the book represents a comprehensive review of the physical and chemical properties, and industrial use of ethylene glycol, diethylene glycol, triethylene glycol and tetraethylene glycol. Also included is information on methods of shipment, specifications and analytical technics required for determining product quality, and includes an extensive indexed bibliography.

Sun Oil Company, Philadelphia, has issued a technical bulletin on its three grades of "Sunaptic" **naphthenic acids.** Included is information on properties, specifications, applications and shipping. Copies are available from Sun Oil's industrial products department, 1608 Walnut street, Philadelphia, 3.

Chemical Business

—*Continued from page 5*

quired in production or unavoidable, should be strictly construed to accomplish the evident purpose of the act. A broad reading of the exception to cover poisons added for merchantability will open the national dietary to needless addition of poisons, and thus will have far-reaching consequences beyond the question of Red 32 for oranges. It will reverse national food policy which has been followed for years."

Tax Cases Being Watched

Two tax cases which will be watched by the chemical industry reached the court from Minnesota and Georgia. Both states have laws which seek to impose an income tax on out-of-state corporations based on the amount of business done within the state. The actions differ from the ordinary cases of this kind in that the states are seeking to collect the taxes on this business even though the selling corporations maintain no office, warehouse or other property within the state.

The Minnesota Supreme Court had ruled that the Minnesota tax law may constitutionally be applied against a proportionate share of the business of the Northern States Portland Cement Corporation. The Georgia Supreme Court, on the other hand, struck down a similar Georgia law which the tax collector attempted to apply on the business of Stockham Valves & Fittings Company.

The two cases have been accepted for arguments by the court. A third case involving a similar question of state taxation powers has just reached the court from Louisiana involving taxation of income of Brown-Forman Distillers Corporation. The Louisiana law was upheld by the Louisiana Supreme Court.

Three Antitrust Cases

Three antitrust cases involving sales of perfumes are before the court for argument. They grow out of actions by the government and sustained in the lower courts against Guerlain, Inc., Parfums Corday, Inc., and Lavin Parfums, Inc. The court is asked to decide whether sales in the U.S. of a single brand of French perfume bearing an American distributor's trademark constitute a relevant market whose monopolization violates the Sherman act.

Another case relates to a trademark controversy between Morgenstern Chemical Company, and G. D. Searle & Co. In this case the federal district court, upon granting an injunction against infringement of a tradename for medicinal tablets, denied an accounting of profits upon finding that there was no actual competition between the two company's tablets. Morgenstern Chemical filed the appeal, but the supreme court has not considered it yet.

The constitutionality of the Oklahoma unfair sales law is involved in another case on file for appeal because of the state supreme court ruling involving trading stamps. The Oklahoma law prohibits sales below cost and Safeway Stores, Inc., was enjoined by the court from reducing its prices on items sold at statutory cost by an amount equal to the value of trading stamps given competitors with sales of the same items at the same prices.

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Coatings Materials

Direct-process blanc fixe will be raised $20 per ton on October 1. This will bring the mines price to $145 per ton in carlots and $155 in smaller lots, while the New York quotation moves up to $195. Higher costs lie behind the advance, trade sources said. Shipments of direct-process material, moving from these domestic sources, have held to a good volume. The by-product field is now dominated by imports, following a major company's decision last summer to stop producing the material.

Prices of lead and zinc failed to respond last week to the announcement that the administration was imposing import quotas on those metals, but the market took on a firm tone. Under the President's directive, imports will be limited to 80 percent of the recorded average for the years 1953-1957; that is 354,720 tons of lead and 520,960 tons of zinc. According to Bureau of Mines figures, imports had been running 30 to 50 percent above these levels earlier in the year.

The administration had tried to avoid taking this step—which could have bad repercussions on relations with producing countries—by proposing to congress a Brannan-type subsidy program. The plan was defeated during the last session.

The asbestos market is in better shape these days, producers report, after a long period of recession-induced doldrums. The construction industry, moving back into the market with heavy demands for cement products and insulation, has been a primary force in recovery. The market took its first and biggest stride out of the recession in July when sales increased 10 percent over July, 1957, after having lagged 18 to 20 percent in the first half of the year. Since then recovery has been gradual. Brake lining, already doing well, is expected to hit a good clip when production of new models commences in Detroit. Replacement sales are running nine percent ahead of last year's total.

October 1 Price Advances

Blanc fixe, $20 per ton.

Buyers of colors in the cadmium group are waiting to see if prices will respond to last Thursday's decline of 10c. per pound in cadmium metal. At this writing sellers were still awaiting word from their front office.

A look at the recent price history of the cadmium group shows that it has been stable for about a year after undergoing numerous downward adjustments during the prior period. Weakness in selenium metal, an important raw material, accounted for the declines.

As previously reported, wood rosin prices will be quoted firmly for periods of three months beginning October 1 in place of the current practice of following the daily market. The fourth quarter schedule lists K and M at $7.80, N at $7.90, WG at $8.25 and WW at $8.60. Gum rosin prices, of course, are not affected.

Plasticizers are moving in good volume, but some in the phthalate group are still subject to shading. This situation is no different from what previously prevailed except in so far as it now includes others besides DOP. The forthcoming advance in alcohol prices is expected in some quarters to firm up the market.

Prime Pigments

Aluminum Paste, Powder—Shipments of atomized and grained powder reached 715,000 pounds in July, the same total reported for July a year ago, comparing with 687,000 pounds produced in June.

Flaked powder shipments totaled 307,000 pounds as against 239,000 in June and 382,000 a year earlier. Shipments of paste, though better than a month earlier, were sharply off from the level of a year ago: 1,620,000 pounds against June's 1,524,000 pounds and 2,023,000 pounds in July, 1957.

Lead Pigments—The White House has imposed a new quota system sharply reducing the allowable number of lead and zinc imports. Effective immediately, shipments are to be limited to 80 percent of the recorded average for the period 1953-57: 354,720 tons of lead and 520,960 tons of zinc. During the first six months of this year imports had been running 30 to 50 percent above these levels, according to Bureau of Mines figures.

This step—one which the Administration had been loathe to take—follows defeat in congress of its minerals stabilization plan, which was designed to help the domestic industry without hurting trade relations with friendly countries.

The move gave a firm tone to last week's market, but price levels held unchanged at the slight advance of a week earlier. Carlot listings quoted 95 percent red lead at 13¼c. per pound, 97 percent at 13.45c., 93 percent at 13.60c., litharge at 12¾c. and mineral orange at 15.60.c.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Sept. 27, 1957
101.45	101.45	101.45	100.74

For Current Prices see page 9

Fillers and Inerts

Asbestos — Stepped-up construction work has pulled this market out of its doldrums by stimulating demand for a broad line of asbestos building materials. The market took its smartest step forward in July when sales increased 10 percent ahead of July 1957 after lagging 18 to 20 percent behind in earlier months. Recovery continued in August but at a more gradual pace.

Along with building materials, brake lining has shown good strength. The replacement market is running about 9 percent ahead of last year's total, while demand for new equipment should get a healthy boost from the Fall season for automobile production.

Still in the doldrums are paper and textiles, according to reports from the trade. Improvement is expected in the fourth quarter, but not much hope is held out for full recovery.

Trade sources said last week that no price changes were contemplated. Supply was described as liberal but not excessive.

Blanc Fixe — Direct-process domestic material will be raised $20 per ton on October 1. This will bring the West Virginia price to $145 per ton in carlots and $155 in smaller lots, and the New York price to $195. Higher costs lie behind the advance, trade sources said. Demand for direct-process has been well sustained this season, meeting adequate supply.

Last Summer a leading maker of blanc fixe by-product gave up on that material, leaving low priced imports to dominate the field.

Natural Resins

Copal Gum—Volume continued to improve last week as the consuming trade moved to fill fourth quarter production needs. All grades were in adequate supply and unchanged in price.

Congo copals moved at 25c. to 26c. per pound for No. 1, 22c. to 24c. for No. 2 and 15¾c. to 17c. for No. 3. Philippine grades were in good call at 23¾c. to 26c. for pale chips, 33¼c. to 37c. for nubs and 20c. nominally for seeds.

Dammar Gum—Fluctuating but generally brisker consuming interest met adequate supply. Quotations were without change.

Siam and Singapore grades were held at recent advances. Siam moved at 31c. to 34c. per pound, and Singapore at 37c. to 42c. for No. 1, 31c. to 34c. for No. 2 and 17c. to 19c. for No. 3 dust.

Shellac—Prices continued last week to reflect stable quotations from the source. Orange grades listed at 38c. to 39c. per pound for lemon No. 1, 36c. to 37c. for

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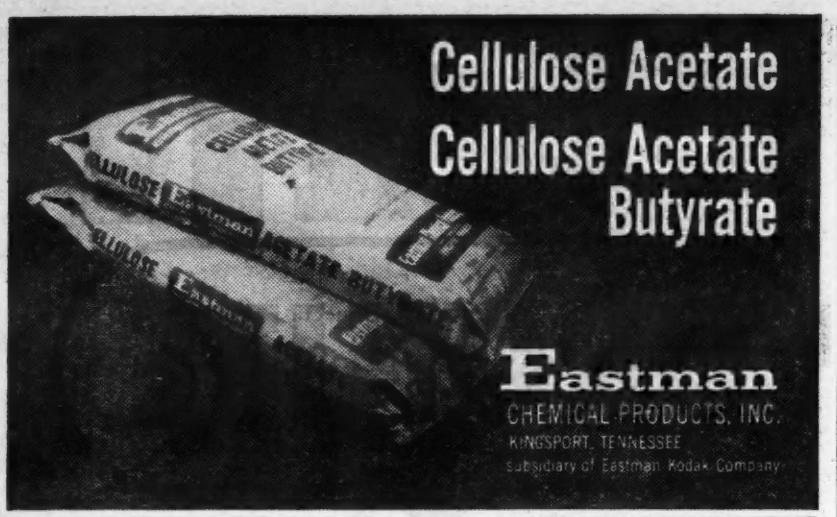

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Harry Holland 19600 Puritan Ave. Detroit 38, Michigan
H. C. Ross 2128 No. Rosemead Blvd. El Monte, Calif.
E. M. Wells Company San Francisco, Calif.

Coatings Materials

No. 2 and 34c. to 35c. for superfine. Bleached was well held at 46c. for bone-dry and 56c. for fully refined in bags, 1,500-lb. lots. Stocks were sufficient to meet all consuming needs.

Miscellaneous

Casein—Market was slightly stronger last week with Argentine quoted at 19c. to 19¼c. per pound, carlots, forward shipment. Soya protein, also selling at that price, continued to exert competitive pressure.

Informed sources in the local market expressed the belief that the Argentine flush season will bring a good yield. They also felt that a decline of 1c. or more in Argentine would serve to neutralize the market advantages enjoyed by soya protein.

New Zealand continued to move to established outlets at 24c. per pound to fractionally higher. Domestic edible casein was steady and unchanged.

Naval Stores

August output of gum naval stores totaled 15,610 barrels of turpentine and 46,510 drums of rosin, a decline of 19 percent from August a year ago. Wood turpentine production was reported at 39,640 barrels as against last month's 36,960 and 41,330 a year earlier. Steam distilled rosin output, at 102,150 drums, showed an advance of 3,360 drums over the level of the prior month.

Rosin—Market experienced increased activity during the week ending September 19, featured by renewed strength in grade WW and tight supply of mediums. Unseasonable warm weather prevailed in producing areas and was expected to persist, together with abnormally low rainfall, through the balance of the month.

Overall sales: 3,237 drum equivalents, including 25.2 percent at the export level, the balance comprising 8.6 percent bags, 25.8 percent hot rosin and 40.4 percent drums.

Turpentine — Agricultural Marketing Service reported sales for the week ending September 19 at 118,775 gallons, 75 percent exports, in contrast to last week's 90,875 gallons, 64.8 exports.

Rosin, Gum
(USDA, per 100 lbs.)

	Fri. Sept. 19	Mon. Sept. 22	Tues. Sept. 23	Wed. Sept. 24	Thurs. Sept. 25
Drums—					
K	...	...	...	$7.94§	...
N	...	$8.00	...	7.89	...
WG	...	8.17	$8.28§	8.20§	$8.15
WW	...	8.60	8.51§	8.70§	...
Bags—					
H	...	...	...	7.69*	...
K	...	...	...	7.65[1]	7.74[1]
N	$7.65	...	...	7.63	...
WG	7.85	...	...	...	...
WW	...	8.22	8.39	8.36	8.46

Tankcars (for week ended September 25).
M or better, $7.40; WW, $8.10; K or better, $7.40.

	Sales, USDA				
	627*	1,335*	1,257	1,156*	767*

New York
(Per 100 lbs., c.l., Friday)
WW, $9.90; WG, $9.50; N, $9.25; K-M, $9.10.

Turpentine, Gum
(USDA, per gal., 7.2 lbs.)

Price	.505	.50	.502	.505
Sales	30,000¶	8,000¶	24,000¶	16,000

New York, Friday, per gal. 7 lbs., tankcars, 63c.; l.c.l. 82c.

* Drums equivalent. ¶ Gallons. § Average price.
[1] K or better.
[2] H or better.

ICC Permits Forwarders To Boost Freight Charges

Chemical men who are conscious of how much it costs them to transport their goods around the country are giving particular interest to the latest move of the Interstate Commerce Commission in regard to freight forwarding charges.

The ICC has allowed the forwarders to "publish" rates reflecting a 3 percent increase next month on most movements east of the Rockies. The permit (Special Permission Order 79018) is not quite final, however, since it does not allow the new rates to go into effect until thirty days after they have been filed with the ICC. The thirty-day clause has been included in order to permit the filing of objections, if any exist.

The freight forwarders are also said to be planning to refile coast-to-coast volume rates held up by the ICC's Suspension Board last month.

General Mills Elects

General Mills, Minneapolis, Minn., has elected G. S. Kennedy to the newly-created post of executive vice-president. Mr. Kennedy has been with the company for forty-four years. At the same time General Mills named E. O. Boyer vice-president and administrator of the flour, feed and oilseeds operations. This was the post formerly held by Mr. Kennedy.

Barclay Chemical Moves

Barclay Chemical Company has moved to new quarters. Its offices are now located at 75 Varick street, New York. The company's telephone number is WOrth 6-4533.

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To the packages of fertilizer and plant food designed for private lawns and gardens, house plants and commercial greenhouses, a new dimension has recently been added in the form of "aromatics". The home gardener who for years has assumed that the unpleasant odor emanating from the package or resulting from the product's wetting, was a necessary evil, is being re-educated to the era of fertilizer aromatics by a number of enterprising producers. In the D&O Industrial Odorant Laboratories, masking and reodorizing compounds have been developed for all types of commercial fertilizer, including those based on *urea, fish solubles, activated sludge, dried blood meal, animal manure, tankage, meat scraps* and *phosphate*. The successful development of such fertilizer odorants has provided an important new merchandising tool to producers...a tool that can be put to work now, for your product by the D&O industrial perfumer. Inquiries are invited.

Write for copy of article entitled "Aromatics in the Fertiliser Industry".

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Essential Oils, Aromatics

Movement on the essential oils market consisted of declines in Florida orange oil and sandalwood oil. Explanations given by producers for the reduced prices were that the season of heaviest demand had passed its peak and that the new crop period is just around the corner. It was hinted as well that speculative interests had bought up quantities of Florida oil at the beginning of the year and did not dispose of as much material as had been anticipated and thus are pressing goods on the market. The sandalwood oil drop was attributed to recent declines in shipping prices at source. This oil has been firm during the last months moving back to more normal prices.

Crops reports for lavandin and lavender for the coming 1958 harvest were favorable. For both crops the weather proved to be advantageous. Problems have arisen however. With the bumper crops there will be some old crop carry over for both materials. Predictions are that the tonnage cannot be consumed by the world market. Thus a trend of falling prices that started before the harvest will probably continue through next year.

The aromatic chemicals market was quiet and unchanged last week, source noted. The most recent price changes were declines in acetophenone, linalool, linalyl acetate, methyl ionone, and rhodinol. Last week a major producer lowered the prices of aldehyde C-16 and cuminic aldehyde. Buying for the account of perfume manufacturers has been picking up and is expected to continue to do so as the fall progresses.

There was a generally softer tone in the seeds and spices market last week, sources here said. Grades of black and white pepper were slightly lower. Singapore has had difficulties with the mass detentions of material plus expenses of reconditioning Lampong pepper. While demand is average, buyers have not seemed overly anxious to build up inventories. Future positions were soft, and there was a certain amount of willingness to sell with the advent of new crop Lampong. Sarawak material was offered at agreeable prices.

Maces were steady, and there is a possibility that prices may move up due to the lack of shipment offers. Spot stocks of cassia are dwindling. Arrivals of Batavias are awaiting release. East Indian nutmeg was firm last week due to the lack of stocks in Singapore. West Indians moved freely.

Price Trends

Advanced

Celery seed, French, 1½c. per lb.
Fenugreek seed, Moroccan, ¼c. per lb.
Paprika, Yugoslavian, ½c. per lb.
Hungarian, 1c. per lb.

Reduced

Cinnamon, Ceylon No. 2, 2c. per lb.
Cloves, Madagascar, ½c. per lb.
Fennel seed, Yugoslav, ½c. per lb.
French, ½c. per lb.
Mace, Siauw No. 2 whole, 5c. per lb.
No. 2 siftings, 5c. per lb.
Orange oil, Florida, 15c. per lb.
Pepper, Malabar black, ½c. per lb.
Lampong black, ½c. per lb.
Muntok white, 1c. per lb.
Sandalwood oil, 75c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Sept. 27, 1957
145.77	145.91	108.68	146.60

For Current Prices see page 9

Essential Oils

Amyris—No further upward moves were recorded for the oil last week, sources reported. The reason behind the firmer tone was unwillingness of Haitian exporters to sell in hopes of higher prices. The listing of amyris oil (or West Indian sandalwood oil) ranged from $1.30 to $1.75 per pound.

Camphor—A firmer tone has been noted lately for both sassafrassy and white camphor oils. The curent market price for sassafrassy grade oil is 40c. to 65c., and white oil ranges from 29c. to 50c. per pound. Japanese exporters have been dissatisfied with recent returns and have been holding back for better prices.

Ginger Oleoresin—Prices of ginger oleoresin from Jamaican root appeared to be moving downward, sources commented. The listing was priced at a new range of $8.75 to $10 per pound.

Lavandin—Beneficial weather conditions made for a good 1958 lavandin crop as well. The crop has been estimated at about 750 tons and there is said to be a carry over of approximately 100 tons. However, this amount of tonnage cannot possibly be consumed by the world market. This will mean that the falling prices felt in the months preceding the harvest will continue through 1958 and 1959.

Lavender—Reports concerning the 1958 harvest of lavender stated that it was a satisfactory one. Abundant rain before the harvest reversed the pessimistic outlook for the crop, and it turned out to be a bumper crop. The increase in production is also due to the fact that new plantations have been springing up. These plantations have not reached their maximum in production which means in the years to come an augmented harvest may be expected.

Orange—A further decline in the price of Florida orange oil occurred last week, sources reported. Factors behind the generally softer tone of the oil were said to be a slackening of seasonal demand for the account of beverage manufacturers and the approaching new crop period. A drop of 15c. put Florida orange oil at a new range of $1.70 to $2.30 per pound. No further declines have been recorded for California material.

Peppermint—A favorable reversal has been made by the Crop Reporting Board in their latest estimates of the size of the 1958 peppermint crop. The prediction by the government agency is that output will reach a level of 2,566,000 pounds. That would be 10 percent above the production in 1957 rather than 13 percent below last year as was foretold earlier. Based on September 1 conditions, the reporting board said that yield prospects had improved during the month in both far-western states of Washington and Oregon. Record crops are now expected for both states. Harvest was expected to be at its height in Washington earlier in the month. Harvest was completed in Oregon in August.

Petitgrain—The last change for the oil was a reduction, sources said. This item has been soft for some time with no shifts in prices in the past several months. The current price of petitgrain oil ranges from $2.35 to $2.95.

Rosemary—The downward movement of the oil seemed to have been restrained. The market has been soft due to a deficit of demand and an over abundance of stocks. Spanish rosemary oil continued at a range of $1.05 to $1.65 and technical oil was steady at 50c. to $1.20.

Sandalwood—One dealer lowered prices of this oil by 75c. last week. Sandalwood oil has been following a pattern of rising prices during the past months. The reversal of this trend was attributed to the fact that shipping prices at source declined $1 recently. The current price range of sandalwood oil is $13.25 to $14.75 per pound.

Spearmint—The earlier prediction that the spearmint crop would be 13 percent below last year's has been revised by the Crop Reporting Board. Now it is estimated that total production will come to 545,000 pounds or 10 percent below last year's and 10 percent below average. In Washington some second cutting was anticipated for this month. In Michigan dry weath-

Imports Detained at N. Y.

Period Ended September 19

Black pepper, 45 lots, 7,170 bags
Caraway seed, 300 bags
Celery seed, 10 lots, 1,457 bags
Chillies, 5 lots, 721 bags
Cloves, 3 lots, 406 bags
Coriander, 5 lots, 1,321 bags
Dill seed, 87 bags
Fenugreek seed, 2 lots, 325 bags
Fennel seed, 2 lots, 240 bags
Ginger, 3 lots, 399 bags
Gum Karaya, 19 lots, 1,027 bags
Mace, 4 lots, 67 cases
Nutmegs, 4 lots, 407 bags
Oregano, 8 lots, 2,643 bags
Papain, 9 lots, 244 bags
Rosemary leaves, 80 bags
Thyme leaves, 200 bales

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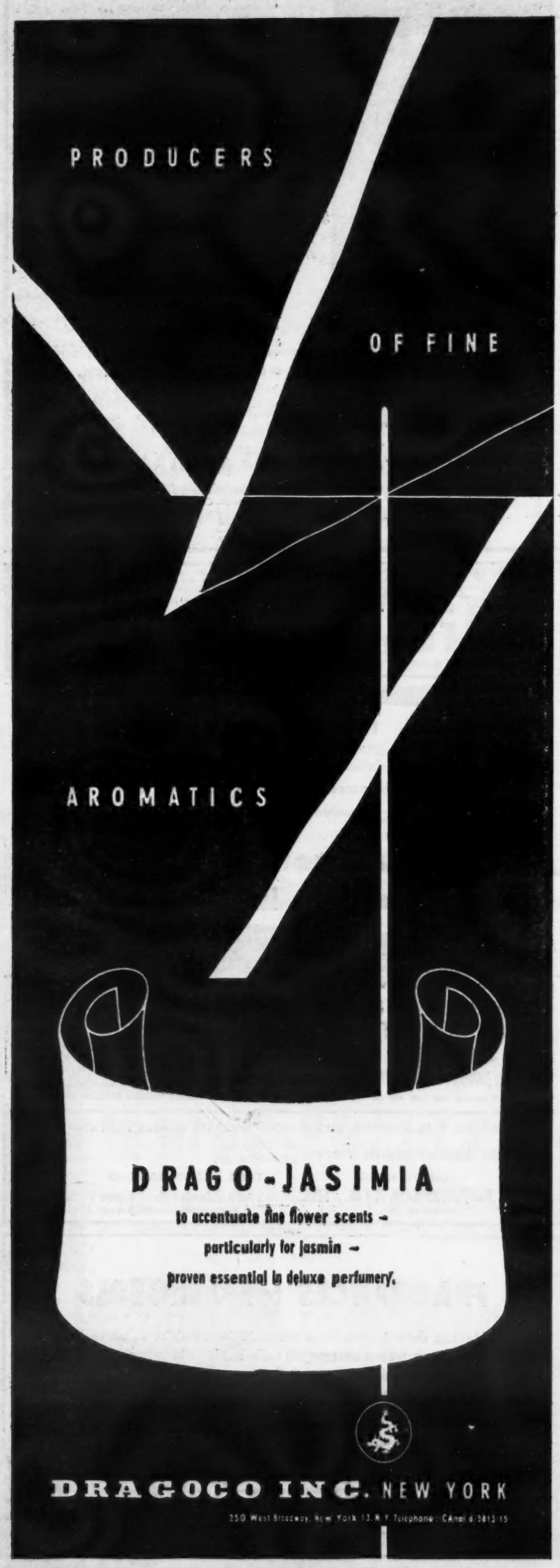


Essential Oils

er damaged the crop, and yields were below normal. Indiana yields were smaller as well.

Aromatic Chemicals

Eugenol—This aromatic chemical does not appear to have been affected by the firmer prices of clove oil of which it is a derivative. The listing ranged from $1.70 to $2.25 last week, sources agreed.

Heliotropin—Listings of this material were unchanged on spot last week, it was noted. The price was ranged from $2.50 to $3 per pound for material in 100 pound lots.

Linalool—A seemingly perpetual soft spot on the aromatic chemicals market is linalool, ex bois de rose. The material has been pulled down by bois de rose which has been declining for over a year. The last price change established the price of linalool as ranging from $4.10 to $4.50 per pound

Linalyl Acetate—This aromatic chemical goes hand in hand with linalool. The material has long been a soft spot on the market due to the continuing sick bois de rose oil market. The current price of linalyl acetate, ex bois de rose, 90 to 92 percent is $4.40 while 96 to 98 percent material ranges from $4.96 to $5.60 per pound.

Rhodinol—Producers of the item firmed the prices not long ago due to the persisting high costs of geranium oil of which rhodinol is a derivative. The current price ranges from $43 to $46 per pound. Synthetic material is steady at $15 to $16.

Seeds and Spices

Cassia—Spot reserves are slowly being depleted. Recent arrivals of Batavias have been waiting release, and it was reported that larger supplies will be available in about two weeks. Saigons were unchanged last week.

Nutmegs—This market continued strong last week in the face of tightening stocks, sources reported. It was said that there were no supplies of East Indian material in Singapore or en route. On the other hand, West Indian nutmegs were moving easily with a spread between prices.

Pepper—The spot market black pepper prices slipped slightly last week despite that Singapore packers have had their difficulties what with mass detentions of material and the expenses of reconditioning Lampong pepper. The trend on spot seems to be one of buy as you need material and there has been no urgency on the part of buyers to build inventories.

Futures eased slightly too. With the advent of new crop Lampong due to come out in October or November, there was some willingness to sell. Sarawak offerings were still soft.

On the white pepper market, prices of Muntok material eased 1c. to a quote of 38c. Spot and afloat stocks seem to be sufficient. Shipment levels were not low enough to encourage speculative buying.

Hontaka and Santaka red pepper appeared to have improved with seasonal demand. Stocks on spot have been moving freely. New crop offerings for October shipment were slightly under spot levels.

Dodge & Olcott to Mark 160th Anniversary in Oct.

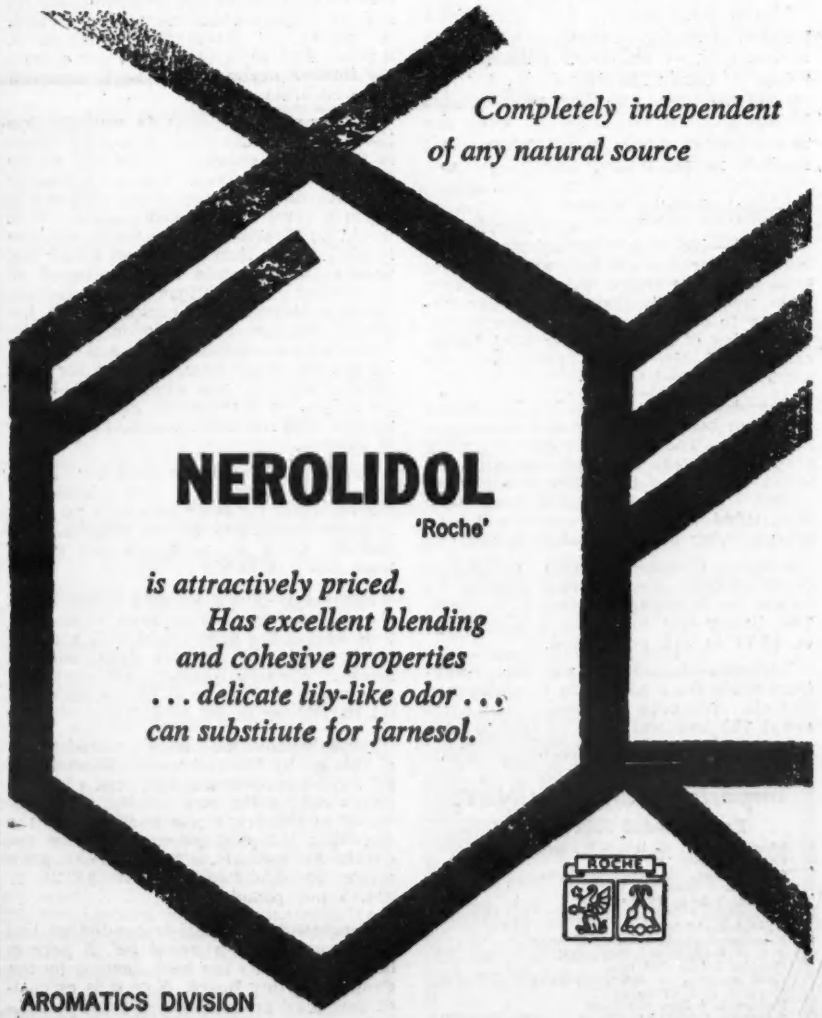
Dodge & Olcott, Inc., New York, will celebrate its 160th anniversary in October.

Established in 1798, during the administration of John Adams, second President of the United States, the essential oils company has a history that is but a few years shorter than that of the American republic.

Dodge & Olcott is said to be the oldest company in America specializing in the manufacture and merchandising of essential oils, aromatic chemicals, oleoresins, seasonings, flavor and perfume bases for the food, cosmetic, drug, soap and industrial odorant industries.

Pfizer Drug Successful

Scientists have come up with a positive clinical report on a new oral diabetic-control drug called "Dianbinese." According to Dr. Zeb L. Burrell, jr., and associates of Milledgeville State Hospital, Ga., the drug was used on 130 patients. Of these, 108 were found to be adequately controlled by the drug. The drug was developed by Chas. Pfizer & Co., Brooklyn N. Y.



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AGAR—10 bls, R B Hayhoe, Kobe
ALLSPICE—120 bgs, Karl H Landes & E Balint, Puerto Barrios
ALOE—35 cs, P H Petry & Co, Aruba
ALUM—300 bgs, C M C Chemicals Inc, Liverpool
ALUMINUM FORMATE—45 dms, Rotterdam
AMINOPYRINE—20 dms, Bremen
AMMONIUM BICARBONATE—300 cs, Chemical Manufacturing Co, Liverpool
AMMONIUM CHLORIDE—200 bgs, Chemical Manufacturing Co, Liverpool
ANILINE DYES—19 dms, Hensel Bruckmann & Lorbacher, Hamburg
95 dms, Hensel Bruckmann & Lorbacher, Bremen
57 dms, Geigy Chemical Co, Havre
141 dms, Sandoz Inc, Havre
1 dm, Hensel Bruckmann & Lorbacher, Rotterdam
36 dms, Carbic Color & Chemical Co, Rotterdam
2 dms, Heemsoth Kerner, Liverpool
113 dms, Rotterdam
ANNATTO SEED—200 bgs, M J Golombeck, Rio de Janeiro
ANTIMONY—430 cks, Hull
ANTIMONY OXIDE—400 bgs, National Lead Co, Hull
ANTIMONY REGULUS—186 cs, Mercantile Metal & Ore Corp, Rijeka
100 cs, Antwerp
ARABIC GUM—450 bgs, Paul A Dunkel & Co, Port Sudan
350 bgs, Meer Corp, Port Sudan
300 bgs, Nehls & O'Connell, Port Sudan
4,000 bgs, Beech Nut Life Savers Inc, Port Sudan
1,003 bgs, Morningstar Paisley Inc, Port Sudan
750 bgs, Bank of New York, Port Sudan
250 bgs, Orbis Products Co, Port Sudan
500 bgs, H Heide, Port Sudan
500 bgs, S B Penick, Port Sudan
250 bgs, Brown Bros & Harrimann, Port Sudan
550 bgs, Duche Uni-Gum Corp, Port Sudan
300 bgs, Port Sudan
1-ARGININE MONOHYDROCHLORIDE—7 cs, Ajinomoto Co of New York, Yokohama
ARSENIC—192 bbls, American Smelting & Refining Co, Tampico
ASAFETIDA—100 cs, S B Penick, Khorramshahr
ASBESTOS FIBRE—6 ctns, P Steinharter, London
450 bgs, Trans World Shipping Corp, Kofka
ASPHALT, PETROLEUM—74,686 bbls, California Oil Co, Bajo Grande
72,369 bbls, Shell Oil Co, Curacao
BARBASCO ROOTS—342 bls, Irving Trust Co, Callao
BARIUM CHLORIDE, ANHYDROUS—220 bgs, Antwerp
BARIUM NITRATE—44 bbls, Chemical Corn Exchange Bank, Hamburg
BEESWAX—102 bgs, Smith Nichols Inc, Santos
29 bls, R B Wilson, Progreso
240 bgs, Empire Trust Co, Porto Alegre
54 bgs, Mercantile Metal & Ore Corp, San Antonio
34 bgs, Curacao Trading Co, Ciudad Trujillo
247 blocks, Assab
100 bgs, Rio de Janeiro
25 bgs, Havana
61 bgs, Santiago de Cuba
BENZOIN GUM—30 cs, Meer Corp, Singapore
BLANC FIXE—500 bgs, C J Osborn Co, Rotterdam
BOIS DE ROSE OIL—4 dms, Lo Curto & Funk, Callao
5 dms, Van Ameringen-Haebler Inc, Callao
BRONZE POWDER—20 dms, Allied Manufacturing Co, Hamburg
1 dm, C H Forsman, Bremen
70 dms, American Express, Bremen
131 dms, Wedemann & Godknecht Co, Liverpool
CALCIUM CARBONATE—500 bgs, Pluess Staufer Inc, Antwerp
1,200 bgs, M Nicholas H Weitzner, Antwerp
800 bgs, Antwerp
700 bgs, Smith Chemical & Color Co, Hull
CALCIUM CARBONATE PRECIPITATED—800 bgs, H J Baker & Bros, Liverpool
CAMPHOR—100 cs, Magnus, Mabee & Reynard, Inc, Keelung
113 pks, P H Petry, London
20 cs, Reich Bros, Hong Kong
CANANGA OIL—1 dm, Mincing Trading Corp, Tandjong Priok
CANDELILLA WAX—313 bgs, Tampico
CARAWAY SEED—100 bgs, Frank Tea & Spice Co, Rotterdam
100 bgs, Rotterdam
CARBON, DECOLORIZING—10 cs, L A Salomon & Bro, Inc, Rotterdam
CARNAUBA WAX—357 bgs, North American Cocoa Trading Co, Salvador, Bahia
CASEIN—2,000 bgs, Crawford Kish & Co, Gdynia
500 bgs, Eugenio Lang, Buenos Aires
200 bgs, First National City Bank, Buenos Aires
100 bgs, First Spice Mixing Co, Rotterdam
1,000 bgs, Tupman Thurlow Co, Buenos Aires
3,000 bgs, F C Gerlach, Buenos Aires
CASSIA—544 pks, Irving Trust Co, Rotterdam
500 bls, Marine Clearing House, Saigon
893 bls, A G Dunn, Saigon
1,391 bgs, Ludwig Mueller, Singapore
451 bls, Catz American Co, Singapore
2,093 bls, Rotterdam
371 bls, Djakarta
CASTOR BEANS—1,667 bgs, Baker Castor Oil Co, Salvador Bahia
CASTOR OIL—300 tons, Western Cotton Oil Co, Santos
300 tons, Baker Castor Oil Co, Santos
300 tons, Recife
CELERY SEED—87 bgs, A G Dunn, Bombay
85 bgs, Kelly's America Ltd, Bombay
CELLULOSE ACETATE—1 cs, Rhodia inc, Havre
CETYL ALCOHOL—41 ctns, Aceto Chemical Co, Liverpool
CHLOROPHYLL—2 kgs, Chas L Huisking & Co, Southampton
CINNAMON—125 bls, Manufacturers Trust Co, Colombo
CINNAMON QUILLS—50 bls, J H Elton Co, Galle
CITRONELLA OIL—15 dms, Albert Verley Co, Hong Kong
5 dms, George Uhe Co, Hong Kong
25 dms, Magnus, Mabee & Reynard, Inc, Hong Kong
75 dms, Chase Manhattan Bank, Keelung
10 dms, George Uhe Co, Keelung
25 dms, Givaudan Corp, Keelung
12 dms, Stein, Hall & Co, Tandjong Priok
125 dms, Internatio-Rotterdam Inc, Keelung
75 dms, Lo Curto & Funk, Keelung
240 dms, Hong Kong
CLOVE—400 bgs, George Lueders & Co, Tamatave
100 bgs, M J Golombeck, Tamatave
200 bgs, W L Wilner Co, Inc, Tamatave
50 bgs, L A Champon & Co, Tamatave
50 bgs, Kemp Day Co, Tamatave
200 bgs, Tamatave
CLOVE OIL—20 dms, Fritzsche Bros, Tamatave
10 dms, Magnus, Mabee & Reynard, Tamatave
9 dms, G M Fakra, Tamatave
30 dms, Ungerer & Co, Tamatave
10 dms, Givaudan Co, Tamatave
10 dms, Hutchinson Co, Tamatave
24 dms, Tamatave
COBALT OXIDE—113 csks, Antwerp
COBALT SULFATE—20 bbls, Philip Bros Chemical Inc, Bremen
COCILLANA WAX—34 bls, Manufacturers Trust Co, Arica
COCHINEAL—50 bgs, Irving Trust Co, Callao
COCONUT OIL, CRUDE—1,178,918 lbs, Pacific Vegetable Oil Corp, Manila
700 tons, American Trust Co, Cebu
562 tons, Pacific Vegetable Oil Corp, Manila
COD OIL—50 ctns, Haakon Fjeldsgaard, Oslo
40 dms, Arista Oil Products Co, Bergenn
COPAL GUM—63 bgs, Wm H Scheel, Manila
250 bgs, S Winterbourne, Matadi
CORIANDER SEED—17 cs, Flora Essential Oils Co, Antwerp
CORNMINT OIL—5 dms, Keelung
CORN STARCH—100 bgs, Antwerp
448 bgs, Rotterdam
CREAM OF TARTAR—500 bgs, Duche Uni-Gum Corp, Leghorn
CRESYLIC ACID—51,954 lbs, Van Oppen & Co, Liverpool
CYANIDE PRECIPITATES—13 cs, A Dishington Co, Puna
DEXTRIN—290 bgs, Manufacturers Trust Co, Rotterdam
500 bgs, Rotterdam
DOGWOOD BARK—293 bgs, Lydia E Pinkham Medicine Co, Kingston
DRY COLORS—10 dms, Harry Solodow, Gothenburg
DYES, COALTAR—50 dms, Hensel Bruckmann & Lorbacher, Rotterdam
67 dms, Hamburg
16 dms, Rotterdam
EARTH COLORS—895 bgs, Naftone Inc, Bremen
1 bbl, M Grumbacher, Bremen
3 pks, American Cyanamid Pigment Div, Rotterdam
900 bgs, Naftone Inc, Rotterdam
FERROUS GLUCONATE—5 bbls, 5 kgs, Hamilton Blair, London
FISHMEAL—833 bgs, Shimbote
FISHLIVER OIL—2 dms, Albumina Supply Co Inc, Yokohama
12 dms, Chase Manhattan Bank, Yokohama
2 dms, Kanematsu New York Inc, Yokohama
3 cs, R S Reade, Yokohama
4 dms, Mitsubishi Intern Corp, Yokohama
2 dms, Arista Oil Products Co, Yokohama
18 dms, Collect Week Corp, Valparaiso
FORMIC ACID—6 dms, Henley & Co, Bremen
FUEL OIL—126,175 bbls, Socony Mobil Oil Co, Puerto La Cruz
51,454 bbls, Esso Standard Oil Co, Las Piedras
119,827 bbls, Gulf Oil Corp, Puerto La Cruz
168,344 bbls, Shell Caribbean Petroleum Corp, Punta Cardon
83,738 bbls, Asiatic Petroleum Co, Havana
372,300 bbls, Esso Standard Oil Co, Aruba
206,000 bbls, Esso Export Corp, Aruba
11,000 bbls, Asiatic Petroleum Co, Aruba
49,680 bbls, Shell Caribbean Petroleum Co, Curacao
GALL, OX—4 bbls, BMT Commodities Corp, Santos
GARLIC OIL—2 cs, Dodge & Olcott Inc, Alexandria
GELATIN—200 bgs, Arles Co, Havre
700 bgs, B Young & Co, London
300 bgs, Transatlantic Animal By-Products Corp, Rotterdam
82 bgs, Coignet Chemical Co, Antwerp
200 bgs, G G Lippelgoes, Hull
GERANIUM OIL—2 csks, Ufinindo Intern Corp, Tamatave
GLUE—20 dms, Franco Belgian Trading Corp, Havre
300 bgs, Jung Forwarding Co, Liverpool
GLYCERINE—270 tons, Procter & Gamble Co, Manila
GRAPHITE—750 bgs, C E Pettinos, Tamatave
680 bgs, J Dixon, Tamatave
GYPSUM, CRUDE—20,584 tons, United States Gypsum Co, Little Narrows
IPECAC ROOT—9 bls, R S Arbib, Santos
5 bgs, Meer Corp, Panama
IRON OXIDE, RED—2 bbls, De Mola Color & Chemical Co, Paita
100 bgs, J Lee Smith, Hull
KARAYA GUM—124 bgs, Colony Import & Export Co, Bombay
60 bgs, Nehls & O'Connell, Bombay
29 bgs, Morningstar Paisley Inc, Bombay
LACTOLBUMINE—912 ctns, A J Mills, Wellington
LEMON OIL—8 dms, Lo Curto & Funk, Vera Cruz
5 dms, Marine Midland Trust Co, Vera Cruz
LEMONGRASS OIL—40 dms, Leonhardt & Brush Co, Puerto Barrios
72 dms, Van Amerinegen Haebler Inc, Cochin
16 dms, Ungerer & Co, Cochin
30 dms, Maywood Chemical Works, Cochin
18 dms, Ludwig Mueller & Co, Cochin
96 dms, Lo Curto & Funk, Cochin
LEMONGRASS OIL—12 dms, Givaudan Corp, Cochin
24 dms, East Asiatic Co, Cochin
12 dms, Fehr Bros, Cochin
6 dms, Fritzsche Bros, Cochin
11 dms, G Lueders, Cochin
LIME OIL—1 dm, Citrus & Allied Essential Oils, Puerto Plata
4 dms, Citrus & Allied Essential Oils, Santiago de Cuba
4 dms, L A Champon & Co, Port au Prince
LOCUST BEAN GUM—100 bgs, Duche Uni-Gum Corp, Rotterdam
200 bgs, P A Dunkel, Rotterdam
MACE—14 cs, A G Dunn, Singapore
21 cs, P H Petry, Singapore
MANGROVE EXTRACT—500 bgs, Saxe Cutch Corp, Singapore
MENTHOL CRYSTALS—10 cs, Manufacturers Trust Co, Keelung
25 cs, Daiichi Bussan Kaisha Ltd, Santos
85 cs, Paul A Dunkel & Co, Santos
40 cs, Magnus, Mabee & Reynard, Keelung
35 cs, Keelung
MERCURIC OXIDE, RED—2 cs, E T Browne Drug Co, Southampton
MERCURY—20 flsks, First National City Bank, Djakarta
METHYL METHACRYLATE MONOMER—1 cs, E I duPont de Nemours, London
MOLASSES—1,110 tons, W R Grace, Salaverry
MUSTARD OIL—13 cs, Florasynth Laboratories Inc, Rotterdam
MYROBALANS—1,600 bgs, Olson Importing Co, Bombay
NAPHTHALENE—1,986 bgs, Standard Naphthalene Products Co, Middlesbrough
NAPHTHENIC ACID—90 dms, Imperial Oil Ltd, Barranquilla
NAPHTHOL—23 dms, Crescent Chemical Co, Genoa
20 dms, Hensel, Bruckmann & Lorbacher, Rotterdam
NICKEL SULFATE—806 bgs, Antwerp
NUTMEG—23 bgs, Karl H Landes & E Balint, Hamburg
21 bgs, Karl H Landes & E Balint, Singapore
12 bgs, Karl H Landes & E Balint, Rotterdam
185 bgs, Rotterdam
OCTYLPHENOL—2 dms, American Express Co, Liverpool
OITICICA OIL—269 tons, Recife
OURICURY WAX—89 bgs, M Argueso, Salvador Bania
80 bgs, North American Cocoa Trading Co, Salvador Bahia
24 bgs, Mercantile Metal & Ore Corp, Salvador Bahia
PALM OIL—410,404 kilos, Balfour Guthrie, Matadi
16 tons, Borden Co, Antwerp
PALMKERNEL OIL—12 dms, BMT Commodity Corp, Rotterdam
PAPRIKA—200 bgs, Meer Corp, Hamburg
PARSLEY OIL—1 cs, Dragoco Inc, Rotterdam
PATCHOULI OIL—8 cs, Lo Curto Funk, Penang
5 cs, J Berlage, Penang
PEATMOSS—4,200 bls, American Express Co, Bremen
3,050 bls, Bruco Peatmoss Corp, Bremen
1,500 bls, Ascot Peatmoss Corp, Bremen
752 bls, Premier Peat Moss Corp, Bremen
800 bls, Halfmoon Manufacturing & Trading Co, Rotterdam
1,282 bls, Ezl Dunwoody, Rotterdam
1,500 bls, New Amsterdam Import Co, Bremen
510 bls, E J Lang, Bremen
1,000 bls, Marine Midland Trust Co, Bremen
2,520 bls, Premier Peat Moss Corp, Hamburg
2,000 bls, Rotterdam
PEPPER, BLACK—490 bgs, Darrnhouwer & Co, Singapore
350 bgs, C M Van Sillevoldt, Singapore
800 bgs, Borneo Sumatra Trading Co, Pandjang
140 bgs, C Czarnikow Ltd, Singapore
80 bgs, Plantation & Colonial Products Ltd, Cochin
160 bgs, Mutual Spice Co, Cochin
140 bgs, Eastern Bank, Singapore
770 bgs, Ludwig Mueller, Singapore
140 bgs, United Commercial Bank, Singapore
210 bgs, W L Willner, Singapore
140 bgs, Pasuma Inc, Singapore
160 bgs, A G Dunn, Galle
80 bgs, E I T Co, Galle
160 bgs, Moller Steampship Co, Cochin
140 bgs, Kuching
210 bgs, Singapore
PEPPER, RED—400 bgs, M J Golombeck, Kobe
300 bgs, Louis Furth Inc, Kobe
200 bgs, Mutual Spice Co, Kobe
200 bgs, Mutual Spice Co, Yokohama
200 bgs, Mutual Spice Co, Yokohama
160 bgs, Mutual Spice Co, Colombo
80 bgs, Farmers Chemical Co, Colombo
40 bgs, Louis Furth, Kingston
80 bgs, M J Golombeck, Kingston
PEPPER, WHITE—70 bgs, R J Spitz, Singapore
PEPPERMINT LEAVES—193 bxs, Meer Corp, Hamburg
PETROLEUM, CRUDE—120,862 bbls, Shell Caribbean Petroleum Co, Punta Cardon
50,932 bbls, California Oil Co, Bajo Grande
36,197 tons, California Shipping Co, Sidon
150,252 bbls, Esso Standard Oil Co, Las Piedras
108,221 bbls, Shell Caribbean Petroleum Co, Bachaquero
267,670 bbls, Phillips Petroleum Co, Puerto La Cruz
POLLACKLIVER OIL—50 dms, Interocean Chemical & Minerals Corp, Yokohama
102 dms, Mitsubishi Intern Corp, Yokohama
POLYETHYLENE—6 bgs, Dayton Rubber Co, London
POLYVINYL ACETATE EMULSIONS—25 bbls, Lloyd Associates, Bremen
POLYVINYL ACETATE RESIN—400 bgs, G G Lippelgoes, Kobe
2 bgs, Kobe
POLYVINYL CHLORIDE RESIN—545 bgs, Iwai N Y Inc, Kobe
3,320 bgs, C Itoh & Co, Yokohama
POPPY SEED—200 bgs, Louis Furth, Rotterdam
570 bgs, Rotterdam
POTASSIUM PRUSSIATE—500 bgs, Haras Co, Rotterdam
POTASSIUM SILICATE—635 bgs, Sylvania Electric Products Inc, Rotterdam
POTATO STARCH—100 bgs, Rotterdam
PYRETHRUM FLOWERS—110 bls, P H Petry, Puna
QUEBRACHO EXTRACT—3,510 bgs, Barkey Importing Co, Buenos Aires
QUEBRACHO POWDER—100 bgs, J E Bernard, Glasgow
RAPESEED—200 bgs, S Davis & Co, Rotterdam
220 bgs, Pedigreed Seed Co, Rotterdam
100 bgs, Levy & Lewis Co, Rotterdam
RAUWOLFIA SERPENTINA ROOT—53 bgs, Meer Corp, Bangkok
ROSEWOOD OIL—5 dms, Chase Manhattan Bank, Callao
SAFROL—5 dms, D W Hutchinson & Co, Yokohama
SAGE LEAVES—200 bls, Sibenik
SASSAFRAS OIL—23 dms, Lo Curto & Funk, Santos
SEEDLAC—250 bgs, Gillespie-Rogers-Pyatt Co, Bangkok
50 bgs, Ludwig Mueller Co, Bangkok
200 bgs, Wm Zinsser, Calcutta
SENNA LEAVES—61 bls, Prentiss Drug & Chemical Co, Port Sudan
SESAME SEED—300 bgs, R J Spitz Inc, San Juan del Sur
150 bgs, Levy & Levis Co, San Juan del Sur
575 bgs, Archibald & Kendall Inc, Cutuco La Union
47 bgs, Levy & Levis Co, Cutuco La Union
SHELLAC—227 bgs, L Levine, Hamburg
400 bgs, Mantrose Corp, Bremen
164 bgs, F H Paul & Stein Bros, Rotterdam
SODIUM CYANIDE—900 dms, Chemical Manufacturing Co, Middlebrough
SODIUM METHYLARSONATE—5 dms, Havre
SODIUM PERBORATE TETRAHYDRATE—1,500 bgs, Chemical Manufacturing Co, Liverpool
SODIUM PHOSPHATE—100 dms, Rotterdam
SODIUM SILICOFLUORIDE—230 bgs, Rotterdam
SODIUM SULFATE, ANHYDROUS—3,900 bgs, Antwerp
SULFATHIAZOLE—10 dms, Conray Products Co, Rotterdam
o-SULFOBENZIMIDE—20 dms, D Hauser, Yokohama
SULFURIC ACID—1 cs, Rohner Gehrig, Havre
TAPIOCA FLOUR—1,103 bgs, DuMont Shipping Co, Itajai
2,800 bgs, Morningstar Paisley Inc, Itajai
3,600 bgs, Stein Hall & Co, Itajai
1,583 bgs, Manhattan Adhesives Co, Itajai
2,200 bgs, Internatio N Y Inc, Rotterdam
1,568 bgs, Stein Hall & Co, Bangkok
623 bgs, H F R Dolan, Jr, Kohsichang
TALU BALSAM—40 cs, Barranquilla
3 dms, Meer Corp, Puerto Barrios
TRAGACANTH GUM—51 pks, Unico Trading Co, Hamburg
TRICHLORETHYLENE—1,266 bgs, Miny Corp, Venice
ULTRAMARINE BLUE—314 bgs, Whittaker Clark & Daniels, Inc, Hull
UREA, SYNTHETIC—2,000 bgs, Chemical Manufacturing Co, Middlebrough
VANILLA BEANS—89 cs, Thurston & Braidich, Tamatave
68 cs, Lo Curto & Funk, Tamatave
60 cs, Madagascar Agencies, Tamatave
22 cs, Dammann & Co, Tamatave
163 cs, Gillespie & Co, Tamatave
14 cs, Frank Tea & Spice Co, Tamatave
72 cs, Otto Gerdau, Tamatave
132 cs, Zink & Triest Co, Tamatave
43 cs, L A Champon & Co, Tamatave
89 cs, Morningstar Paisley Inc, Tamatave
43 cs, Tamatave
25 cs, Djakarta
VETIVER OIL—1 dm, Antoine Chiris, Tamatave
VITAMIN B—3 cs, Kingsley & Keith, Kobe
6 dms, Takamine Overseas Inc, Yokohama
VITAMIN C—30 dms, Mitsubishi Intern Corp, Yokohama
WATTLE BARK—1,664 bls, Hammond & Carpenter Inc, Durban
XYLOL—2 dms, Eastman Kodak Co, Hamburg
YLANG-YLANG OIL—2 kegs, Cody Products Co, Havre
ZINC OXIDE—600 bgs, I M Sobin, London
1 bx, Railway Express Agency, London
ZINC DUST—3 dms, Union Carbide Corp, London

Los Angeles

AGAR—13 cs, Pan Asiatic Trading Co Inc, Shimizu
CARAWAY SEED—75 bgs, Rotterdam
CASSIA—280 bls, Catz American Co, Singapore
CASEIN—500 bgs, Borden Co, Buenos Aires
CELLULOSE NITRATE—14 cs, Kanematsu N Y Inc, Kobe
COPRA—2,500 tons, American Trust Co, Tacloban
1,000 tons, Procter & Gamble Co, Tacloban
740 tons, Procter & Gamble Co, Jagna
600 tons, Procter & Gamble Co, Medina
500 tons, Cargill Inc, Legaspi
500 tons, P S Smith, Siain
COPRA CAKE—2,000 bgs, Balfour, Guthrie & Co, Ltd, Manila
2,240 bgs, Cargill Inc, Manila
2,240 bgs, Pacific Vegetable Oil Corp, Manila
EARTH COLORS—600 bgs, Castelazo & Associates, Rotterdam
GLUE—40 bgs, London
OLIVE OIL—100 dms, G M Importing Co, Marseille
PEATMOSS—500 bls, Atkins, Kroll & Co, Bremen
PETROLEUM, CRUDE—179,820 bbls, Hancock Oil Co, Aruba
146,463 bbls, Texaco Co, Ras Tanura
POLLACKLIVER OIL—44 dms, Yokohama
QUEBRACHO EXTRACT—523 bgs, Barkey Importing Co, Buenos Aires
TAPIOCA FLOUR—3,212 bgs, Stein, Hall & Co, Bangkok
1,332 bgs, Geismar & Co, Inc, Bangkok
VITAMIN C—10 dms, Air Express Intern Co, Yokohama

Philadelphia

ASBESTOS FIBER—1,600 bgs, Keasbey-Mattison Co, Liverpool
400 bgs, Kurz Co, Loudenco Marques
120 bgs, Ehret Co, Lourenco Marques
1,600 bgs, Lourenco Marques
CALCIUM CARBONATE—1,210 tons, Southwalk Manufacturing Co, London
600 bgs, Antwerp
CAMPHOR—8 dms, Vicks Co, London
CHINA CLAY—14,264,432 lbs, Fowey
CRESYLIC ACID—225 dms, Concord Chemical Co, Rotterdam
200 dms, Glasgow
FLUORSPAR—3,155 tons, Miller Co, Aviles
GRAPHITE—600 bgs, Asbury Graphite Co, Hamburg
IODINE—40 kgs, Philadelphia National Bank, Yokohama
MAGNESIUM CARBONATE—400 bgs, Glasgow
MAGNESIUM OXIDE—416 ctns, Darlington Chemical Co, Manchester
700 bgs, Darlington Chemical Co, Liverpool
NAPHTHALENE—445 bgs, Schlesinger Inc, Durban
OLIVE OIL—53 dms, Manufacturers Trust Co, Tarragona
PEANUT OIL—349,636 lbs, Simonin's Sons, Liverpool
PEATMOSS—1,999 bls, Premier Peat Moss Co, Bremen
500 bls, Keer-Maurer Co, Bremen
800 bls, Vandegrift Co, Bremen
PETROLEUM, CRUDE—133,086 bbls, Atlantic Refining Co, Pamatacual
116,659 bbls, Atlantic Refining Co, La Salina
116,693 bbls, Socony Mobil Oil Co, Covenas
251,597 bbls, Gulf Oil Corp, Puerto la Cruz
135,630 bbls, Atlantic Refining Co, Puerto la Cruz

—Continued on page 70

WAXES

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Oils, Fats and Waxes

Firmer tone featured edible oils last week due to the temporary strength of cottonseed oil, which was reflected in competing oils. Fractional advances also took place in corn, peanut and soybean oils. Limited offers of crude coconut oil from Philippines and Indonesia continued to feature this market. This brought active inquiry from European buyers and kept the market in a firm position. Copra also was strong and slightly higher.

Further weakness developed in tallow and greases due to the slow export business. Sizable volume of business took place at lower levels for domestic account. Lard was quiet, but remained steady.

Linseed oil was unchanged and seed. Activity in this oil continued for delivery against existing contracts, while new business was restricted to actual needs. Oiticica remained steady, with fair demand reported for nearby delivery. Trading in tung oil was limited to actual needs as buyers preferred to await the announcement of the selling price of government-owned oil. Last week at a meeting in Washington between government officials and members of the trade, the latter were requested to submit suggestions by October 10 for the disposal of 14,000,000 pounds of 1956-57 crop tung oil obtained under the support program. Cod oil on spot was in limited supply and firmer. The dock strike in Newfoundland has been settled. Shipments were in better demand and closely held.

Soybean meal was scarce and higher for nearby delivery, advancing $2 per ton. Linseed meal also was stronger and raised $1 per ton. Peanut meal continued scarce and raised $2 per ton.

Price Trends

Advanced

Cod oil, ½c. to ¼c. per lb.
Copra, $1 per ton.
Corn oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Cottonseed oil, crude ½c. per lb.
Refd., ½c. per lb.
Linseed meal, $1 per ton.
Menhaden oil, crude, ¼c. per lb.
Peanut meal, $2. per ton.
Peanut oil, crude, ½c. per lb.
Refd., ½c. per lb.
Soybean meal, $2 per ton.
Soybean oil, crude, ¼c. per lb.
Refd., ¼c. per lb.

Reduced

Cocoa butter, 4c. per lb.
Cottonseed meal, $1. per ton.
Greases, ½c. per lb.
Tallow, inedible, ½c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Sept. 27, 1957
109.26	108.33	109.15	118.53

For Current Prices see page 9

Vegetable Oils

Castor—Spotty demand was reported for prompt delivery. No. 1 Brazilian was maintained at 16c. per pound, tankcars, New York prompt delivery. Offers for shipment from Brazil were limited. Domestic grades were quotably unchanged and steady.

Import of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds Castor Beans	Castor Oil
Last week	250,000	3,000,000
Previous week	1,257,900	1,670,000
Corresponding week, 1957	125,000	1,712,000
Total this year	10,868,800	56,103,000
Corresponding period, 1957	13,154,700	77,840,000

Coconut—Scarcity of offers from the Philippines and increased interest for European account kept market steady. Crude was sold at 14½c. per pound, tankcars, f.o.b. Pacific coast, prompt shipment and 14⅜c., October. Tankcars were maintained at 15½c., New York basis.

Corn—Crude was firmer with competing oils. Tankcars were sold at 12¼c. per pound, f.o.b. mills, prompt shipment. Refined was higher at 15.98c. per pound, tankcars, New York, prompt delivery.

Cottonseed — Futures developed a stronger tone last week, reaching new highs for the current move, chiefly as a result of the more tense Formosa situation. Allied markets also were firmer. Good demand and short covering reached stop loss orders and prices scored fractional gains. Export business continued slow. Consuming demand was slightly improved as the market worked upwards. Cash oils were stronger. Refined salad oil was boosted to 14¾c. per pound, tankcars, New York, prompt delivery.

Disappearance of refined cottonseed oil in August totaled 1,409 tankcars against 1,472 in July and 1,848 in August last year. Visible supply at the end of August amounted to 3,834 tankcars against 3,589 a year ago.

Crude oil also was more active and advanced fractionally under moderate volume of business. Market closed irregular and early gains were reduced. Tankcars in the southeast were nominal at 11½c. with sales down to 11¼c. in the Valley. Waco was nominal at 11c. and Lubbock at 10¾c.

Linseed—Improved demand was reported for delivery against current contracts, while new business was restricted to actual needs. Market was steady and unchanged. Tankcars were maintained at 13.2c. per pound, f.o.b. Minneapolis, September-December delivery, 13.4c., January-March and 13.6c., April-June.

Flaxseed — Market tone remained steady. Bids unchanged.

Minneapolis.—Firm undertone persisted in cash flaxseed, bids unchanged at $3 a bushel, spot ad to-arrive, basis Minneapolis. Peak of harvest has passed, although some combining remains in North Dakota, and bulk of supplies were going directly into country storage space. Indications are that, with U. S. flax the world's cheapest, export demand will be principal influence on the market.

Receipts and shipments of flaxseed, in bushels, were as follows:

	Receipts 1958-59	Receipts 1957-58	Shipments 1958-59
Past week	864,500	1,335,250	145,250
Since Sept. 1	5,304,250	3,591,500	631,750

Oiticica — Trading was restricted to prompt delivery. Tankcars were quoted at 16½c. per pound, New York, prompt delivery. Drums were held at 18c. to 18½c., spot, as to quantity.

Olive—Buying interest was light, chiefly for spot delivery. Replacements were quiet. Tunisian oil was unchanged at $58 to $59 per 100 kilos, drums, c. and f. New York, prompt shipment. Greek oil offers have been withdrawn. Spanish oil ranged from $61 to $62, per 100 kilos, drums, f.o.b. shipping point. Stocks on spot were unchanged at $2.50 to $2.60 per gallon, drums, duty paid, as to quality and quantity.

Palm—Demand was confined to actual needs. Drums were held at 14c. to 15c., per pound, spot as to quantity and 11½c., tankcars, prompt delivery.

Peanut—Scarcity of stocks stiffened this market. Crude was higher at 15¾c. per pound, tankcars, mills, southeast. Refined was maintained at 19¼c., tankcars, New York basis.

Rapeseed—Business was light, chiefly for immediate delivery. Tankcars were held at 16c. per pound, New York, prompt delivery. Drums were unchanged at 17½c. to 18c., as to quantity.

Soybean—Firmer beans and competing oils were reflected in crude oil. Market closed slightly higher for the week. Crude sales were reported at 10c. per pound, tankcars, Decatur, unrestricted, for nearby and closed at 9⅞c. for September, and 9¾c. October. Refined salad closed higher at 12½c. per pound, tankcars, New York prompt delivery.

Crude soybean oil disappearance in August was indicated at 5,765 tankcars against 5,125 in July and 4,918, August, 1957. Disappearance for 11 months during this season totaled 57,893 tankcars compared with 52,124 for the same time last season. Visible supply was estimated at 6,488 tankcars end of August against 5,619 a year ago.

Tung—Trading continued light and spotty. Tankcars were quoted at 21c. per

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, September 26, follow:

	Sales	High	Low	Close
		Cents per pound		
Oct.	53	13.60	13.11	13.30S
Dec.	516	13.37	12.98	13.06S
March	280	13.40	13.05	13.12S
May	128	13.40	13.05	13.14S
July	18	13.29	12.99	13.04S

Total sales and switches, 995 contracts.

Oils, Fats and Waxes

pound, New York, prompt delivery, but shadable. Drums were held at 22½c. to 23c., according to quantity.

Miscellaneous

Cocoa Butter—This market was lower, due to sharp decline in futures. Spot supplies ranged from 92c. to 97c. per pound, according to quantity.

Copra—Market was stronger due to active inquiry for European delivery. Shipments were raised to $198 per ton, c.i.f. Pacific coast. Offers were scarce.

Fats and Greases

Greases—Weak tone continued to feature this market and prices dropped fractionally for all grades. Trading was moderate at the lower levels. Yellow grease sold at 6⅞c. per pound, tankcars, delivered. Choice white was easier and named at 8c., same basis.

Lard—This market was narrow and remained fairly steady. Cash lard was quoted at 15.525c. per pound, drums, Chicago.

Oleo Oil—Quietness prevailed in this market. Extra was unchanged at 17¾c. to 18c., per pound, drums, as to quantity. Oleo stearine was nominal at 13½c. to 14c. same basis.

Tallow — Lower prices brought improved trading for domestic delivery. Bleachable fancy was sold at 7⅞c. per pound, tankcars, delivered. Prime was available at 7⅝c.; special, 7⅜c. and No. 1, 6⅞c. to 7c., same basis. Edible was unchanged at 11c., same basis. Export business continued slow. Guaranteed fancy was lower at 9⅛c. per pound, drums, f.a.s. and shadable.

Cottonseed Crush: August

Cottonseed received and crushed and production of cottonseed products during August and July, as compiled by Bureau of Census, follows:

	August	July
Cottonseed		
	Tons	
Receipts at mills ...	304,504	81,347
Crushed or used ...	147,634	132,108
Stocks at mills	331,385	174,515
Crude Oil		
	Pounds	
Produced	48,129,000	45,054,000
Stocks at mills.....	17,170,000	17,074,000
Cake and Meal		
	Tons	
Produced	69,370	59,542
Stocks at mills.....	78,441	112,475
Hulls		
	Tons	
Produced	36,078	32,568
Stocks at mills	86,947	97,322

Fish Oils

Cod—The dock strike in Newfoundland has been settled. Market was steadier for spot and shipment. Shipments were firm on the basis of 8¼c. per pound, drums, exdock. Supplies on spot were firmer and ranged from 9¼c. to 9½c., drums, depending upon quantity and seller.

Menhaden—Crude was firmer as a result of reduced production. Tankcars were raised to 7¼c. per pound, f.o.b. works. Trading was spotty for domestic delivery, while export interest was less active. Menhaden fishing was poor and some operators have stopped for the season. Light pressed oil was unchanged but steadier at 10½c. per pound, tankcars, New York basis, with less disposition to accept lower bids.

Cake and Meal

Cottonseed Meal—Trading improved, but was still spotty. Meal, 41 percent was quoted at $56 per ton, sacked, Memphis; $58, Alabama, and $62 to $63, Georgia and South Carolina, September-October shipment.

Linseed Meal—Active demand strengthened market. Prices up $1 per ton.

Minneapolis.—This market was strong with excellent demand for nearby supplies and increased interest in deferred needs. Prices advanced $1 a ton. Exceptional strength in soybean meal was additional bolstering influence. Additional pickup ocurred in pace of withdrawals against existing contracts, shipping schedules well filled. Extracted meal, 34 percent, was held at $50 to $50.50 a ton, bulk, in carlots, f.o.b., Minneapolis for October delivery and $50.50 to $51, November/December. Old process, 32 percent, was at $57 a ton for October/December delivery.

Shipments of linseed meal, in pounds, were as follows:

	1958-59	1957-58
Past week	13,200,000	11,700,000
Since Sept. 1	45,240,000	54,120,000

Peanut Meal—Demand was restricted to local delivery. Prices were firmer ranging from $62 to $64 per ton, sacked, f.o.b. mills Georgia and Alabama, September-October shipment.

Soybean Meal—There was excellent demand for nearby delivery of soybean meal

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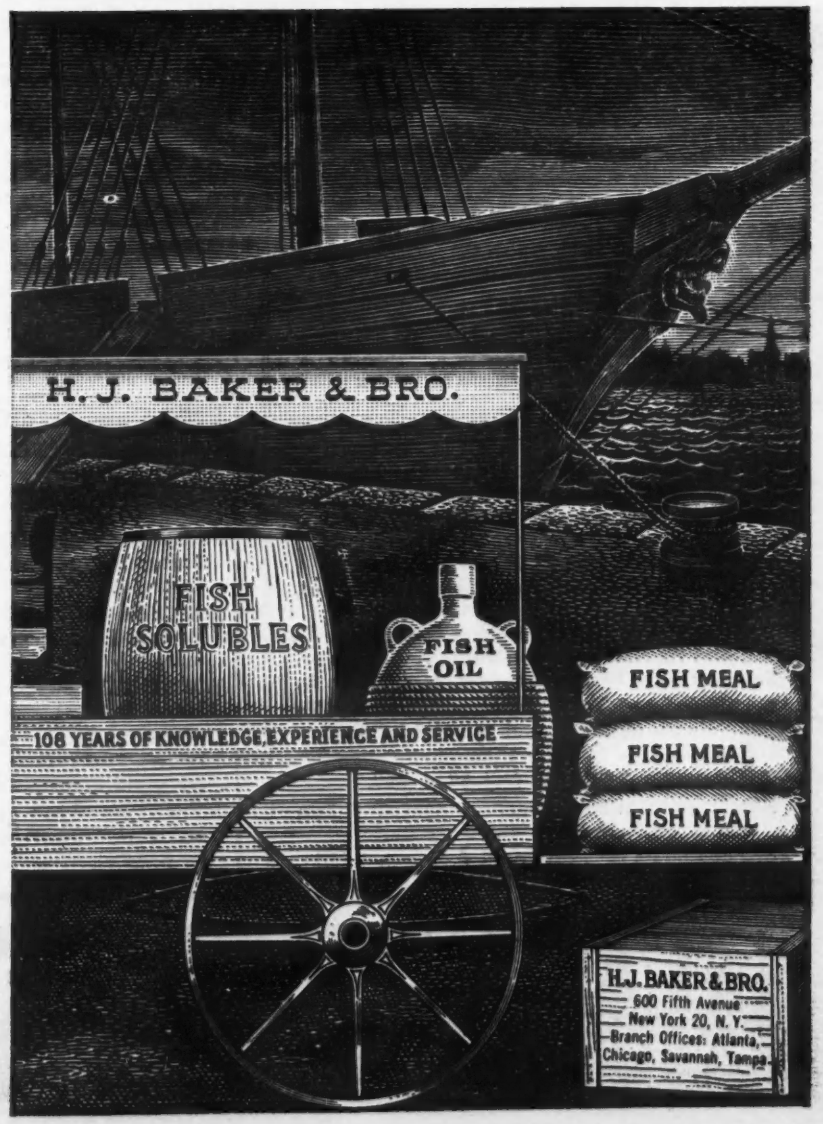

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CHEMICAL AND PROCESS MACHINERY

RAYMOND 3 Roll High Side Mill — 6' Raymond double whizzer seperater — EIMCO 6'x8' Rotary Vac. filter — LANCASTER EMG 4½ Muller Mixer — 24"x20' STAINLESS STEEL ROTARY DRYERS — P. & S. 4 Truck hot air dryer — STOKES DDS 2 pelleting presses — SHRIVER 36" filter press — ROTEX #11 shaker screens — BACON 20"x6" jaw crushers — PANGBORN dust collectors — NASH & OLIVER vacuum pumps — Curtis air compressors — LINK BELT bucket elevators 14' to 40' centers — screw conveyor — DORR thickener mechanisms — 20,000 gal. hor. steel tanks — 675 KVA 700 HP MG set — 15" American Radial drill — SHAW-BOX 10 Ton crane 30' span — Dbl. leg gantry crane 10' High — BIRMINGHAM 5000# Electric drop hammer — 2000# and 4000# TOWMOTORS — Electric and Toledo dial scales — 200 Motors 1 to 150 HP — Fans — Blowers — starters — Instruments — GE water coolers — Bins — Cypress wood tanks — glass and durimet Valves — Lockers — Rubber pressure hose.

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BP 100 gal. Sigma Arms Jktd. Mixer.
Pfaudler 1500 gal. Glass Tank, closed top.
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Gen. Amer. 42" x 120" Twin Drum Dryer.
Fitz Mill, all S/S, model "D", 5 HP.
Link Belt S/S Rotary Dryer, 5 ft. x 20 ft.
Gruendler "BB" Whirlbeater Hammer Mill.
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Oils, Fats and Waxes

while supplies were extremely tight, especially unrestricted and eastern trunk line. In the West immediate shipment was more readily obtainable. Feed manufacturers generally confined purchases to early October, or until new soybeans become available. Unrestricted meal was quoted as high as $63 for immediate shipment, virtually unobtainable. Meal, 44 percent, was quoted at $61 a ton, unrestricted, bulk, Decatur, for delivery first half October; $56, last half October; $53, November-December.

Waxes, Vegetable

Moderate improvement in the consuming demand for carnauba grades continued to feature this market. Trading was fair, chiefly for actual needs, though more interest was reported for later requirements. Prices were steady, reflecting the firmness of the Brazilian market. Offers for shipment continued scarce. Interest in refined beeswax also was more active, with fair sized lots moving for prompt delivery. Crude beeswax, however, continued quiet and more or less nominal.

Soybean Crush: August

Soybeans received and crushed and production of soybean oil and meal during August and July, as compared by the Bureau of Census, follows:

Soybeans

	August	July
	Tons	
Receipts at mills ...	440,796	740,358
Crushed or used ...	948,598	898,680
Stocks at mills	419,690	927,492

Crude Oil

	Pounds	
Produced	340,868,000	372,856,000
Stocks at mills	99,434,000	119,372,000

Cake and Meal

	Tons	
Produced	740,537	714,727
Stocks at mills	93,221	61,314

LABORATORY HEAD: Dr. Joseph Migliarese, named head of the new laboratory for biological research by Colgate-Palmolive Company, Jersey City, N. J. The lab is located adjacent to Rutgers University in New Brunswick, N. J.

National Distillers Elects John C. Bierwirth a V.P.

National Distillers & Chemical Corporation, New York, has elected John C. Bierwirth a vice-president of the company. He is a son of John E. Bierwirth, chairman of the board.

Assistant treasurer for the past year, Mr. Bierwirth went to National in 1957 from New York Trust Company where he was an assistant vice-president.

Phila. Druggists to Hold Outings

The Philadelphia Drug Exchange will hold its annual fall outing on October 7 at the Manufacturers Golf & Country Club, Oreland, Pa. Dinner will be at 6:30 p.m. Golfers will compete for the Philadelphia Drug Exchange Trophy.

BIG BARGAINS IN GUARANTEED REBUILT EQUIPMENT

3 A. O. Smith Stainless Lined Pressure Tanks; 10' x 18'7"; 11,000 gal. like new condition.
Blaw Knox Stainless Reactor or Resin Kettle, 7'6" x 7'6"; welded; jacketed; agitated.
4 Stainless Steel 5000 gal. Closed Top Tanks, welded construction; 10' diameter; agitated.
Steel Reaction Kettle; 1500 gal.; ASME; 72" x 62"; jacketed; agitated; motorized.
NEW Falcon Stainless Reactor; 125 gal. 30" x 30"; jacketed; agitated; motorized.
2 Steel Retorts ASME 250#; 90 gal. 2' x 4'.
Laboratory 2 Roll Rubber Mills; 6" x 13"; 8" x 16".
A. T. & M. Stainless 60" Centrifugal Extractors; link suspended; center slung; vapor-tite.
Tolhurst 40" center slung, rubber covered Basket & Curb; Monel Plow; 2 speed motor.
Merco Type 316 Stainless Centrifuge Model B 9; 15 HP XPL.
Bowser Pressure Filter; 2000 GPH; 69 sq. ft.
Mojonnier Stainless Steel Cooler, 16 Plates, 46" x 60".
Sharples Stainless Super-D-Canter; 10 HP.
Sharples H2 Nozzlejector; 1000 GPH; XPL motor.
Stainless Steel Heat Exchangers, to 4000 sq. ft.
Big Single Punch Tablet Presses; Colton No. 5½; 4T Stokes Model T and Kux Model 60 A — like NEW.
J. H. Day 3 Roll Lab. Mill 5" x 12".
Filter Presses in Stainless, Aluminum, Cast Iron and Wood from 7" to 42" complete.
Rotary Cutters by Abbe, Ball & Jewell, Whitin, Leominster, Sprout Waldron, all sizes.

BRAND NEW FALCON MIXERS
In Stock for Immediate Shipment
Stainless or Mild Steel
Approved Sanitary; Smooth Interiors
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INCONEL Double Effect Evaporator by Zaremba 850 sq. ft. and 430 sq. ft.; with Calandria.
SWENSON Quadruple Effect Long Tube Vertical Film Type Evaporator complete unit.
MOJONNIER Stainless Steel Vac, Pans; 3' x 10'; 6' x 12'.
ZAHM & NAGEL Evaporator or Continuous Concentrator; 2500 lbs. water per hr.; for rapid evaporation.
DEVINE Calandria type Single Effect Evaporator with Downcomer Tube, and Barojet Condenser.

Largest Stock of Baker Perkins Heavy Duty Double Arm Mixers from Lab. size to 300 gal.
Pittsburgh Lectro Dryer Type BWC; size 3500.
Bagley & Sewell Double Drum Dryer, 28" x 60".
Buflovak Dbl. Drum Dryer, 40" x 120" complete.
Hersey Rotary Gas Fired Counter Current Dryer; 5' x 26' complete accessories.
Stokes Rotary Jacketed Dryer, 18" x 8'.
Louisville Stainless Steel Indirect Fired Dryer; 30" x 28'.
American Dbl. Door Sterilizer; 30" x 48" x 84".
Brine cooled Crystallizers; 24" x 12' x 21".
Stainless Lined Rotary Dryer, 50" x 20' with Oil Burner, Combustion Chamber, etc.
Day Cincinnattus Stainless Steel 300 gal. Jacketed Double Arm Mixer; XPL motor.
Lancaster Mix Muller Mixer Type EAG; Bowl size 45⅝"; capacity 5½ cu. ft.
Porcelain and Buhrstone Lined Pebble Mills; 30" x 42"; 37" x 48"; 6' x 6'; 8' x 8'.
Sifters and Screens by Day RoBall; Orville Simpson Rotex, Gyro Whip; Patterson, Robinson.
4 Stainless Mikro Pulverizers Model No. 2; other Mikros from Bantam size up to No. 4.
American Pulverizer Ring Roll Crusher; 30" x 37"; 50 HP.
National Erie Extruder 6" x 66"; Jacketed Head; complete.
Stainless Mikro Atomizer No. 5; motorized.
Tumbling Batch Mixers; 17 cu. ft., 75, 300 cu. ft.
Munson Rotary Mixer No. 7; 160 cu. ft., 15 HP.
Day Hi Speed 3 Roll Mill; 14" x 30" water cooled with 25 HP motor; late model.

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$4,500,000 LIQUIDATION

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MAIN ITEMS

CENTRIFUGES: 1—Bird 32" x 50" solid bowl continuous, 316 S.S.; 4—Sharples C20 Super-D-Hydrators, 316 S.S.; 2—Sharples PN14 Super-D-Canters, 316 S.S.; 1—AT&M 30" suspended perforated basket, 316 S.S.

FILTERS: 1—Eimco 10' x 12' rubber covered Rotary Vacuum; 2—Oliver 8' x 8' Precoat rubber covered Rotary Vacuum; 1—Oliver 3' x 4' lead Rotary Vacuum; 4—Sperry 36" rubber covered Plate & Frame, 30 chambers; 4—Sperry 36" PVC sprayed, 30 chambers; 4—Sperry 42" aluminum, 36 chambers.

EVAPORATORS and CRYSTALLIZERS: 2—Swenson 350 sq. ft. lead Evaporators, Everdur tubes; 4—Struthers-Wells 9' dia. x 22' high rubber lined Vacuum Crystallizers; 1—Struthers-Wells 8' dia. x 26' high rubber lined Vacuum Crystallizers.

PULVERIZERS and MILLS: 4—Raymond 5 roll high side Mills #5057, Double Whizzer Separator; 1—Williams 4 roll high side "Standard" Mill, Whizzer Separator; 5—Mikro Pulverizers, 4TH, 3TH, 2TH, motor driven; 2—Abbe 5' x 16' brick lined Mills; 1—Complete Micronizing installation including Pulverizers, Hoppers, Conveyors, etc.

ROTARY KILNS: 1—Traylor 11' x 155'; 1—Vulcan 8' x 125'; 2—Vulcan 8' x 50'; 2—Vulcan 6' x 60'.

ROTARY DRYERS: 1—Traylor 5' x 50'; 1—5' x 24'; 1—4' x 25'; 1—4' x 20'; 1—Proctor & Schwartz 8' wide x 60' long Conveyor Dryer, S.S. belt.

RUBBER LINED TANKS: 1—15' x 20'; 1—14' x 30' Scrubber Tank; 2—14' x 10' agitated; 2—12' x 12' agitated; 4—10' x 10' agitated; 1—10' x 8' agitated; 1—10' x 18'; 2—9' x 9'; 1—9' x 10' agitated; 1—8' x 40' Scrubber Tank; 1—8' x 24' Scrubber Tank; 1—8' x 8' agitated; 1—6' x 8' agitated; 2—5' x 6' agitated; 1—4' x 6' agitated.

LEAD LINED TANKS: 1—15' x 20'; 1—15' x 12'; 2—12' x 14' agitated; 1—12' x 12'; 2—10' x 8'; 1—8' x 12'; 1—8' x 10' agitated; 2—8' x 7' agitated.

STEEL TANKS: 1—12' x 15'; 1—10' x 12' agitated; 2—10' x 10'; 1—8' x 30' pressure; 4—8' x 30'; 1—8' x 14'; 6—8' x 10' agitated; 1—8' x 8'; 1—8' x 6' agitated; 1—5' x 12'.

COMPRESSORS: 1—Worthington 1000 cfm, 30 psi; 1—Sullivan 1000 cfm, 30 psi; 1—Ingersoll Rand 500 cfm, 30 psi; 1—Ingersoll Rand 300 cfm, 180 psi.

VACUUM PUMPS: 1—Ingersoll Rand 500 cfm; 2—Worthington 500 cfm; 1—Joy 500 cfm; 1—Ingersoll Rand 300 cfm.

MISCELLANEOUS: Steel Buildings; 2—Shepard Niles 20 ton Overhead Cranes; 4—Cottrell lead lined Precipitators; 2—Permuttit Water Softeners; 5—Dorr Thickeners 70', 50', 40', 16' and 14' dia.; 2—Sweco 4' dia. Stainless Separators; 1—Bemis 50# Bag Packer with sewing machine conveyor and flattener; 3—16" Belt Conveyors; 3—Bucket Elevators 65 to 125 ft. high; Redler Conveyors 5" and 10"; Screw Conveyors 6" and 9"; 150—LaBour, Durco, Worthite, Duriron and Stainless Steel Centrifugal Pumps, 2" to 6", with motors.

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REACTORS - KETTLES - EVAPORATORS - CONDENSERS - TANKS

1—4000 gal. 347 S.S. jacketed Reactor, 8' x 8'8", 150# internal.
2—1500 gal. Pfaudler, glass lined, jacketed, agitated Reactor.
1—500 gal. Walters, 304 S.S. jacketed, agitated Reactor, 4' x 5'.
1—500 gal. Blaw-Knox, 347 S.S. jacketed, agitated Reactor.
1—1400 gal. Blaw-Knox, steel, jacketed, agitated Reactor.
1—550 sq. ft. Buflovak, monel, single effect Evaporator.
1—250 sq. ft. Buflovak, 304 S.S. forced circulation Evap.
1—20 sq. ft. Buflovak, 304 S.S. forced circulation Evapora...
1—3500 gal. 304 S.S., jacketed, agitated Tank, 9' x 7'.
2—5000 gal. 304 S.S. horizontal Tanks, 6'6" x 20'.
1—9400 gal. 316 S.S. horizontal Tank, 8'6" x 19'.
1—4000 gal. Haveg, vertical Tank, 8' x 12'.
1—12,000 gal. horizontal, steel Pressure Tank, 7'6" x 36', 200 psi.
8—Stainless Heat Exchangers; 1220, 942, 786, 536, 396, 315, 250, 157 sq. ft.

CENTRIFUGES

3—Bird; 32" x 50", 24" x 38", 18" x 28", 316 S.S., Solid Bowl, Continuous.
1—Bird 24" x 38", Monel, Solid Bowl, Continuous.
1—Bird 18" x 28", steel, Solid Bowl, Continuous. NEW.
2—Sharples PY14, PN14, Super-D-Canters, 316 S.S.
1—Sharples C20 Super-D-Hydrator, 316 S.S., XP construction.
3—Bird 40" suspended, 347 S.S., perforated basket, TEFC motor.
1—Bird 40" suspended, rubber covered, perforated basket.
1—Hercules 40" center-slung, rubber covered, perforated basket.
1—Tolhurst 30", 304 S.S., underdriven, perforated basket.
2—Sharples #16, 304 S.S., 3 HP motor.

FILTERS

2—Feinc 5' x 6', Stainless, Rotary Vacuum.
2—Oliver 8' x 8', rubber covered, Rotary Vacuum.
2—Sparkler 33S28 Filters, 150 sq. ft., 304 S.S.
1—Niagara 36H110 horizontal Filter, 110 sq. ft., 304 S.S.
1—Sparkler 33-S-17 steel Filter, 92 sq. ft.
1—#12 Sweetland Filter, 48 leaves, 3" centers, 640 sq. ft.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.
1—Sperry 18" x 18" Filter Press, 316 S.S., 23 chambers.

DRYERS

1—Devine Vacuum Shelf with 19—59" x 78" shelves.
2—Devine Vacuum Shelf with 6—40" x 43" shelves.
2—Overton 42" x 120", Atmospheric, Double Drum.
1—Overton 12" x 19", Atmospheric, Double Drum, chrome rolls.
2—Devine 5' x 12', 4' x 9', Atmospheric, Single Drum.
2—Devine 3' x 8', TEFLON Coated, Rotary Vacuum.
2—Louisville Rotary Steam Tube, 5' x 20', 6' x 50'.
2—Rotary Kilns, 10' x 120', 6' x 50'.
3—Rotary Dryers; 6' x 50', 5'6" x 50', 5' x 30'.
2—Link Belt; 7'5" x 25' Monel, 6'4" x 24' 316 SS, Roto Louvre Dryers.

MIXERS

1—Baker Perkins #16TRM, 150 gal., jacketed, sigma blades, Vacuum, 50 HP motor.
1—Baker Perkins #15VUMM, 100 gal., jacketed, Dispersion blades, 100 HP motor.
1—Baker Perkins #15JNM, 100 gal., jacketed, Sigma blades, 30 HP motor.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
1—Day D10 Powder Mixer, 304 S.S., 7½ HP motor.
5—Steel, jacketed Powder Mixers; 50, 225 and 350 cu. ft.

PULVERIZERS — MILLS

1—Hardinge 4½' x 24" Conical Ball Mill.
2—Abbe 5' x 6', 4' x 5', silex lined Pebble Mills.
5—Jeffrey Hammer Mills; 20" x 12", 15" x 8", motor driven.
3—Mikro Pulverizers; 4TH, 3TH and 2TH.
1—FitzMill model D, 304 S.S., 7½ HP motor.
2—Kent, Ross, 6" x 14" Three Roll Mills.

MISCELLANEOUS

3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
3—25 ton Freon Refrigeration Units.
4—Rotex Sifters; 40" x 84", 60" x 84", Double Deck.
3—Robinson Gyratory Sifters, 30" x 104", Triple Deck.
8—Stokes DD2, B2, "R", and "F" Tablet Presses.
10—Nash Vacuum Pumps; H6, L5, L3, TS7, #2, MD572.
25—Chlorimet, Durimet and Duriron Centrifugal Pumps, 1½" to 6".

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LIQUIDATIONS

PENICILLIN PLANT EQUIPMENT

4—SS fermenters, 750 gal., ASME 30# int. & jkt., 10 HP XP agit.
2—SS fermenters, 125 gal., ASME 30# int. & jkt., 2 HP XP agit.
5—Pfaudler glass lined reactors; 30, 100, 300 gal., jkt. & agit., ASME.
1—T316 SS rotary vac. filter, 18" dia. x 12" face, Eimco.

RAYON PLANT at OLD HICKORY (NASHVILLE) TENN.

24—200 gal. Baker Perkins jkt. sigma-blade mixers, #17-VII.
12—30" Sperry P.&F. filter presses, C.I., 17 chambers, closed delivery.
2—30" Sperry "Ni-Resist" P. & F. filter presses.
50—Viking pumps.
50—Lead valves up to 12" dia.
2—Nash H-5 Vacuum pumps.

ALSO — Steel tanks, pumps, motors, transformers, piping, etc.

SEND FOR COMPLETE LISTS

EQUIPMENT IN STOCK

CENTRIFUGALS, BASKET
48" suspended, T304 SS, A.T.&M.
40" suspended, steel, Bird.
36" centerslung, bronze, Tolhurst.
30" suspended T304 SS, Fletcher.
12" underdriven, T316 SS, Fletcher.

DRYERS, DOUBLE DRUM
42" x 120" Buflovak—atm.
42" x 90" Buflovak—atm.
36" x 84" American—VACUUM.
32" x 72" Buflovak—atm.
22" x 38" Witteman—atm.

DRYERS, VACUUM SHELF
356 sq. ft. Devine, Steel.
108 sq. ft. Andersen, T316 SS.
80 sq. ft. Devine, UNUSED.
36, 24, 12 sq. ft. Stokes, steel.

FILTERS, PRESSURE
510 sq. ft., vert., Niagara #510-28, T316 SS.
151 sq. ft., Sparkler #33-S-28, T304 SS leaves.
130 sq. ft., horiz., Hercules #12,
110 sq. ft., horiz., Niagara #36H-110-3, T304 SS, 1954.
80 sq. ft. Niagara, T304 SS, Jktd.
45 sq. ft., Niagara #45-30, SS.
Sweetland filters, #12, 7.

MILLS, BALL — PEBBLE — ROD
4'6" x 16" Hardinge conical ball mill, 25 HP, bolted liners.
7' x 15' Rod Mill, Marcy, 300 HP.
5' x 10' Rod, Kennedy.
5'6" x 22' ball-tube, Allis-Chalmers, 150 HP.
6' x 16' ball-tube, Allis-Chalmers.
6' x 4'6" Marcy #64½, 125 HP.
4'6" x 12' contin., Patterson.
8' x 10' pebble, batch, Patterson.
6' x 8' pebble, contin., Patterson.
6' x 8' pebble, batch, Patterson.
6' x 5' pebble, batch, H. K. Porter.
5' x 6' pebble, batch, Abbe.
3'6" x 4' pebble, batch, JACKETED.

DISTILLATION COLUMNS
6—COPPER BUBBLE CAP: 48" dia. x 20 plate; 42" dia. x 40' plate; 42" dia. x 20 plate; 24" dia. x 11 plate.
4—COPPER TUNNEL CAP: 36" dia. x 59 plate; 36" dia. x 39 plate; 36" dia. x 27 plate; 24" dia. x 30 plate.

CRUSHERS
Gyratory, Kennedy, #49S, 100 HP.
Gyratory, Kennedy, #14, 75 HP.
Double-roll, 24" x 24", 20 HP.
Sawtooth, Robinson #13, 15 HP.
Jaw, 8" x 10", Sturtevant.
Jaw, 18" x 9", Mitchell, 25 HP.

ROTARY DRYERS (KILNS)
8' x 115' kiln, brick-lined.
#502-20 Roto-Louvre
7' x 120' kilns, brick-lined.
8' x 70' Dbl. shell, Hardinge, #XA-18, (indirect-direct).
6' x 50' steam tube, Louisville.
6' x 30' steam tube, Louisville.
5'6" x 50' Renneberg.
4'8" x 33', ⅜" shell.
4'6" x 40' Ruggles-Coles, 5/16".
4'6" x 32' steel shell, ⅜".
4' x 30' Dbl. shell, Tylor-Harmor.
4' x 24' brick-lined (kiln).
4' x 12'6" Sturtevant, SS.
3' x 15', Everdur metal shell.
Link-Belt "Mono-tube" dryer, 10' long.
#504-24 Roto-Louvres, T316 SS.
Hammermill, 50 HP, Jeffrey.
#310-20 Roto-Louvre, steel.

MIXERS, DOUBLE ARM
200 gal. Baker Perkins #17-VII sigma blade, Jktd.
Baker-Perkins #K-300 "Ko-Kneaders," 60 HP.
100 gal. Baker Perkins #15-USE, disp. blade, SS, Jkt., vacuum.
100 gal. Baker Perkins #15-VUMM, Jkt., 100 HP.
100 gal. Baker Perkins #15-JYUE, sigma blades, Jkt.
35 gal. J. H. Day, sigma blades.

MILLS, PULVERIZERS
Hammermill, 400 HP, 47" x 60", Penna. Crusher #5060, 1952, non-clog, UNUSED.
Hammermill, 60 HP, Penna. Crusher, #C-3-30.
Pulverizer, 75 HP, Babcock & Wilcox, #E-32.
Roller mill, 66" Raymond low-side, 6 roll, 200 HP.
Roller, Raymond, #5057, hi-side.
Gyratory crusher, Kennedy #49S.

120,000 SQUARE FEET OF EQUIPMENT IN STOCK AT

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HOMOGENIZER — Manton Gaulin, S.S. Model 500E, 500 GPH, 5000 PSI.
OLIVER VACUUM FILTERS—S.S. 316, 3' x 6' Complete. (1954).
MICROPULVERIZER—1 SH Stainless.
EVAPORATORS—Single effect—All Monel 290 sq. ft. 150 sq. ft. Complete.
CENTRIFUGES—Tolhurst 26" Monel; 40" S.S. Susp; 40" Rubber Covered.
FILTER PRESSES—Shriver 36" x 36"—34-1½" Rubber Covered Frames.
PFAUDLER—G/L Kettles 75, 200, 300, 600 gal.
HARDINGE Conical Ball Mills, 4½' x 16".
MIXER, DAY—2½ gal. D.A. Sigma, Jack., Vacuum, 5 H.P.

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Lightnin' 3 h.p. ex. proof g.h. Agitator.
American 36x42x84" dbl. dr. Sterilizer.
Lamson Pressure Blowers, 15 h.p. motors.
Lydon Atmospheric Tray Dryer.
#2 and #10 Sweetland Filters.
Day #30 & 40 Imperial jac. Mixers.
Sprout Waldron 80 cu. ft. Ribbon Mixer.
Robinson Size #10 Unique Gyro Sifter.
Stokes "T" Tablet Machine, vari-drive.
Kux #74 & 82 Tablet Machines, vari-drive.
Mikro #27H Pulverizer, 15 h.p. motor.

What do YOU have for sale?

BILL WOLF, Inc.
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MUrdock 6-8883

FILTERS—48" x 12" Eimco, 3' x 4' Oliver Rot. Vac. w/accessories, 6" square lead Filter Press w/pump.
KETTLES—150 Gal. Jack., 500 Gal. Pfaudler galss, jack.
SCREENS—24" Riddles, 20" x 84" Rotex 3 deck, 40" x 84" Roball 2 deck, 3 x 5, 3 x 10, 4 x 10 Tyler Hummer.
MILLS—Pebble—Lab sizes, 30 x 24, 30 x 42, 3' x 4', 6' x 5' porc. lined, 6' x 8' Buhrstone lined, 4½' x 16" Hardinge Conical.
CRUSHERS—2¼ x 3 Braun Lab., 9 x 16 Climax, OO Sturtevant Rotary (3HP).
MILLS — Hammer — Raymond Lab (1 HP), Williams AKB (25 HP), 3W Mikro (30 HP), NF Williams (50/100 HP).
FORK LIFT TRUCKS—2000# Hyster 12' lift, Yale & Towne 6000# w/all weather cab, fluid drive, both pneumatics.
ROTARY DRYERS—24" x 22', 36" x 24', 44" x 25'. Parts available to 9' dia. Dryers built to your specifications.
PUMP—Blackmer 4" (25 HP) unused, Viking 4" (15 HP), Wilfley 4" Acid (centrifugal).
FEEDERS—Vibrating Syntron F11 8" x 16", F21 (8" tube), F22 (12" tube), F33 (18" x 48").

LAWLER COMPANY
LAWLER PLACE METUCHEN, N. J.
LIBERTY 9-0245

1—Patterson Jaketed Buhrstone Lined Pebble Mill, capacity 27 cu. ft., with motor.
1—Sparkler Stainless Filter Model 33-S-9.
2—Sperry 30" Filters, clsd. del., 39-pl. 40 fr.
1—Sperry Filter 42", open del., 40-plates, 41-frames.
3—Baker Perkins Mixers, jacketed, heavy duty, sigma blade, 300 gal. with hydraulic dumpers.
1—#10 Day 300 gal. jacketed Sigma Blade Mixer.
1—International Pebble Mill, porcelain lined, 48" dia. x 60" face, direct motor drive—like new.
1—Day "00" Pony Mixer with ½ H.P. Motor.
1—Stainless Tank #430 Chrome, vert. 7' x 10' deep.
1—New Glass Nash Centrifugal Pump 100 gpm.
1—New Nash Vacuum Pump, Type AL-572.
1—Buflovak Jacketed Impregnating Tank 42" x 52".
1—Stedman Disintegrator size 40-6.

FOR SALE

1—Jeffrey Vibrating Conveyor 12" x 6"—15' long.
1—Nash Air Compresser, Type AL-623.
1—Manton Gaulin Stainless Homogenizer 125 gph.
4—Heat Exchangers, 12" dia. 11' lg., 43 steel tubes.
1—Louisville Steam Tube Dryer 6' x 35'.
1—#316 Stainless Reactor, 265 gals. cap., jacketed.
Abbe Pebble & Tube Mill 5' x 22"—Buhrstone Lined.
2—Patterson Ball Mills, porcelain lined, 17" x 27"
1—Robinson Ribbon Blender & Sifter 125 cu. ft.
1—Ribbon Blender 100 cu. ft.
3—J. H. Day Ribbon Blenders & Sifters, 600#.
2—Ball & Jewell #2 Cutters with 75 H.P. motors.
1—J. H. Day 3-roll Mill 10 x 16.
3—3000 gal. Jacketed Kettles with Turbo Agitators.
4—New Heat Exc. 60" with Cupro Nickel Tubes.
3—4' x 8' Shaker Screens—1 & 2 Deck.

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SPECIALS

Pony Mixer: Hockmeyer 60 gal. (Unused).
Pony Mixer: Troy 40 gal. 2-speed.
Bartelt Packaging Machines (2).
Standard-Knapp 429 carton Gluer/Sealer.
Percolators: Pfaudler, stainless, 54 x 42".
Mills: Fitzpatrick model D, st. st., jktd.
Crystallizers: 500 gal. stain. jack., agit.
Dryer: Porter 2 x 4' vac. drum, st. st.
Centrifugal: Tolhurst 26" rubber, 2-speed.
Mix-Mullers: Simpson Lab., Porto, #00.
3-roll Mill: Day 12x32" hi-speed, 2-speed.

Write us or call Seeley 8-1431.
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MACHINERY FOR SALE

1—Ruggles Coles 4' x 20' direct fired rotary dryer.
1—Readco 25 gallon stainless jacketed vacuum mixer.
6—Rotex sifters 40" x 120", 40" x 84", 60" x 120" and 20" x 48" single and double deck.
1—Nash H-6 vacuum pump, 20 HP.
5—80 gallon stainless jacketed and agitated autoclaves.
2—Mikro atomizers #5 and #6, stainless.
1—200 gallon Baker Perkins double arm jacketed mixer.
1—Fitzpatrick model K stainless.
1—24" solid rubber Shriver filter press.
1—Selectro 2' x 7' stainless sifter.
2—20 gallon and 50 gallon jacketed agitated Pfaudler glass lined reactors.
5—Simpson mixers 18", 24" and 36" diameter.
5—Ribbon blenders 6 cu. ft., 30 cu. ft., 48 cu. ft. and 200 cu. ft. capacity.

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Raymond 2 stage Flash Drying System:—
1—#40 Raymond Imp. Mill-30 HP. & drive.
1—First Stage Cyclone with Accessory duct work.
1,000,000 B T U flash hour gas fired furnace with Maxon pre-mix burner and Bristol pyrotol combustion safeguards.
3—Second Stage prane series 84, Type E Heaters.
1—Dracco type S, 3 compartment dust collector with 75 spun Nylon bags plus 150 space bags & Kidde type A.F.C.O. Extinguishing Systems.
1—two pen Bristol recording thermometer.
1—two pen Bristol controller w/proportional positioner.
1—Raymond #7-14 Second stage Blower 5 HP.
1—Raymond #12-24 Dust Collector exhaust blower.

ALSO

1—Rotex Screen 40" x 84" w/drive & 1½ HP. motor.
1—St. Regis 100 F. S., Valve type bag packer.
1—Type W size 16 Rotoclone Dust Collector.
3—Tolhurst 40" Sus. Style Centrifugals—Steel perforated baskets 10/5 HP. 1200/600 rpm.
1—Tolhurst as above 32" perf. Basket.
2—6" Screw feeders with drives & motors.
1—Gruendler Hammermill w/10 HP. Drive & single screw feed w/½ HP. motor.
1—Ind. 18" x 18" Wd. Pl. & fr. Filter Press.
1—Stainless Tank 150 gal. w/agitator.
1—Raymond Laboratory Pulv. Single screw.
3—Centrifugal Pumps 1½" and 2". Misc. Piping valves etc.

All priced to move quickly. Write or telephone either:

THE MACHINERY & EQUIPMENT CORP.
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AARON EQUIPMENT COMPANY
Chicago 8, Ill., CHesapeake 3-5300

EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

4—Vulcan type 316 SS bubble cap column 3' x 18' with 11 trays.

1—Swenson type 316 SS vacuum crystallizer 3'6" x 12', complete.

1—Swenson type 316 SS vacuum crystallizer 2'6" x 12', complete.

5—Badger type 316 SS heat exchangers, 569 sq. ft., 467, 330, 170 sq. ft.

1—Merco type 316 SS centrifuge, Model B9.

3—Tolhurst center slung rubber lined centrifuges, 48" and 40".

1—Baker Perkins type 316 SS Ter Meer Centrifuge, Model HS-24".

1—Louisville SS rotary dryer, 30" x 28'.

1—Stokes SS rotary vacuum dryer, 3' x 15'.

2—Louisville steam tube dryers 6' x 50'.

1—Louisville steam tube dryer, 8' x 45'.

2—Stokes vacuum shelf dryers, 4 shelves.

1—Stokes SS rotary vacuum dryer, 2' x 6'.

1—Oliver horizontal filter 6'6".

1—Stokes double drum dryer, 5' x 12'.

1—Oliver horizontal 3' pilot plant filter.

1—Sweetland #3 filter, 70 sq. ft.

10—Sweetland #12 filters with 72 SS leaves.

1—Shriver SS 18" x 18" plate and frame filter press, 8 chambers.

1—Niagara SS filter, Model 510-28.

1—Feinc SS rotary vacuum string filter 3' x 3' (NEW).

1—Lee SS jacketed kettle, 125 gal.

1—Theo. Walters SS jacketed reactor, 500 gal.

1—Acme type 316 SS jacketed kettle, 2,000 gal.

1—Nickel jacketed kettle, 1,000 gal.

1—Pfaudler Series P, 20 gal. jacketed reactor.

1—Patterson steel jacketed 3,000 gal. mixing kettle.

3—Howes 40 cu. ft. rubber lined ribbon blenders.

1—Leader SS jacketed ribbon blender, 51 cu. ft.

1—Simpson 18" muller.

R. GELB & SONS, INC.
UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

FROM STOCK — H&P — MONEY SAVERS

SEND FOR CAT 758

604x24 Stainless Rote-Louvre Dryer.
705-24 & 502-16 Rote-Louvre Dryers.
8'8"x70' Ruggles Cole Dryer.
6'x50', Rotary Steam Tube Dryers.
32"x100" Double Drum Dryer.
Jeffrey Hammermills 36"x24", 24"x18", 20"x12", 15"x8".
25' to 90' Centers Bucket Elevators.
40" Tolhurst S.S. Susp, Cent. 15 / 7½ HP.
40" Fletcher Steel Susp. Cent. m.d.
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5'3"x6' Rubber Oliver Precoat Filter.
6'x8' Eimco Steel Rotary Vacuum Filters.
Sweetland #10 Filter 36 Stainless Leaves.
3 Roll Raymond Hi Side Roller Mill.
#6669 Raymond 6 Roll Hi Side Roller Mill.
#5057 Raymond 5 Roll Hi Side Roller Mills.
#11 Rotex Screens 20"x48".
5750 gal. All Stainless Tank.
500 gal. Stainless Tanks.

HEAT & POWER Co., Inc. PROCESS EQUIP'T DIV.
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SPECIALS FROM OUR STOCK OF OVER 10,000

1-Column, 42" x 70' Steel Fractionating
1-Mill, Raymoud 5 Roller Low Side, 100 HP
1-Dryer, Buflovak 42"x90" Double Drum
1-Tank, 2250 gal Closed Stainless
1-Mill, Sturtevant Model 1½ Ring Roll
2-Expellors Anderson Super-Duow/Cook

1-Dryer, 8'x50' Rotory, ½" shell
3-Disintegrators, Rietz RDH-18 316 S.S.
1-Centrifuge, AT&M 42" susp bask
1-Reactor, Braun 850 gal Nickel lined
2-Mixers, J. H. Day 40 gal Pony, 3 HP
2-Kettles, New Green 60 gal SS Model DA

For any item you need, wire or phone collect GA 1-1380

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SAVE ON GOOD USED MACHINERY

CENTRIFUGALS—12", 30", 40" & 48".
CENTRIFUGES—Sharples #5 Stainless. Also #6.
DRYERS—Allright Nell 4' x 9' Atmos. Drum Dryer.
Buffalo Vac. Drum Dryer 24" x 20".
Vac. Shelf & Rotary Dryers.
FILLERS—Powder & Liquid. Also Labelers.
FILTERS—Vallez type 49, with 41 Stainless covered leaves.
#2 Sweetland 12 Stainless covered leaves.
Ertel 6" & 10" Disc type.
FILTER PRESSES—6" to 36" Iron & Wood.
KETTLES—Stainless Jack. 80, 60, 50 gal.
Dopp 350 gal. Cast Iron Jack. Vacuum.
Devine Impreg. Units 30" & 36" dia.
Lead Lined Kettle 250 gal.
Steel, Alum. & Copper 5 to 2,000 gals.
MILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000.
Mikro Pulverizer #4, 2S1, 2TH, 1SH, Bantam.
Hammer Mills & Pulverizers 3 to 50 HP.
Williams #BB, #3 & #2XX Hammer Mills.
Ball & Jewell Rotary Cutters Lab. to 50 HP.
Pebble, Jar & Ball Mills, Lab. to 6' x 8'.
Steel 3 Roll 9" x 32", 12" x 30" & 16" x 40".
Lehmann 4 Roll W. C. 12" x 36" Steel Colloid Mills Stainless Steel 5 & 1½ HP.
MIXERS—Baker Perkins 100 gal. Jack.
Day Imperial 75 & 150 gals. Jacketed.
Day Pony Mixers 8, 15, & 40 gals.
Day Jumbo 700 gal. horiz. Mixer.
Blystone 3000# horiz. spiral Mixer.
Dry Spiral Mixers 50 to 3000#.
Lancaster 6' dia. vert. mixer 25 HP.
PUMPS—Stokes, Buffalo etc. Vac. 10 to 500 CFM.
Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Robinson 20" x 48" Gyro, 8 openings & others.
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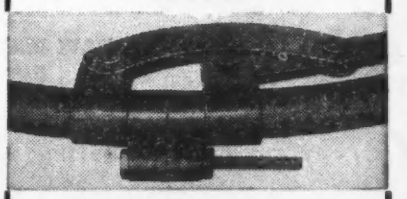

Providing the convenience which has made the lever type ring so popular, and the positive security of the bolted ring which is so essential.

The only locking ring which combines both of these features.

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A well established financially responsible firm in Mexico, specializing in chemicals with manufacturing plant, highly trained technical staff and well equipped laboratories would consider collaboration with first-class American firms desiring to extend business to Mexico. OPD 623.

EQUIPMENT OFFERED

For Sale: four 220 cu. ft. (1650 gal.) Sprout-Waldron heavy duty steel double ribbon powder Blenders; 600 gal. stainless paste Kettle, 15# jkt. 20 H.P. XP varidrive motor and heavy duty Agitator; 275 gal. stainless paste Kettle, 25# jkt. 10 H.P. XP varidrive motor and heavy duty double acting Agitator; 150 sq. ft. stainless Heat Exchanger; 42" x 90", 32" x 100", 32" x 72" double Drum Dryers; 3000 gal. stainless vacuum Tank with coil. Best Equipment Company, 1737 W. Howard St., Chicago 26, Illinois AMbassador 2-1452.

EQUIPMENT WANTED

Wanted: Fatty Acid Batch Distillation Unit 3,500 gallons minimum capacity. Send details and price. OPD 610.

FACILITIES WANTED

Wanted: Vacuum distillation facilities within 50 miles NYC on toll basis. Require: dependable vacuum under 5 mms. absolute; 100 psi steam or equivalent temperature minimum; 1500 gallon minimum 24-hour throughout. Prefer: agitated or forced circulation still, equipped with short, low pressure-drop column for moderate fractionation. OPD 624.

MATERIALS OFFERED

Camphor Granules USP: Priced from 49 to 57 cents per pound, delivered! Packaged in 100 pound polyethylene lined fibre drums. Samples available. Terms 1% 10 days. Supply limited! Jay-En Commercial Company, 2130 Fillmore, San Francisco, California.

For Immediate sale: 10 drs. Butyrolactone 20c./lb.; 50 drs. Redist. Chloroform 7c./lb.; 50 drs. Sec. Amyl Alcohol 8c./lb.; 20,000 gallons (bulk) Lacquer Thinner, 45% Ketone-Ester/55% Toluol-Xylol 35c./gal. Chemsol, Inc., 74 Dod Street, Elizabeth 3, N.J., Flanders 1-2020.

MATERIALS OFFERED

Autumnal Array of amazing values: Arochlor 1242; Nickel Acetate; Camphor/Paraformaldehyde mildew preventative; Isothymol (mixed isomers), Tungsten Carbide. Industrial By-Products & Supply Co., 40-40 Lawrence Street, Flushing, N.Y. INdependence 1-4100.

Below Market:: 7625 gallons prime isobutanol; 26,100 gallons recovered methanol Fort Wayne, Indiana area; Higher Alcohol Mixtures; redistilled MEK and MIBK regularly available; Lacquer thinner; 1000 pounds each phthalocyanine blue toner, permanent red-2B, lithol rubine toner. Broker inquiries invited. Mercury Chemical Corp., 45 Janet Lane, Springfield, N. J. DRexel 6-3220.

For Immediate shipment 1000 Cases (24—5 lb. cans, each) Caustic Soda Flake (J. T. Baker brand) F.O.B. Rome, New York. Advise quantity you want and we will quote prices. Telephone: REliance 5-4700, Arthur S. LaPine and Company, 6001 South Knox Avenue, Chicago 29, Illinois.

POSITIONS OFFERED

Chemical Salesman experienced, chemical degree desired. Handle industrial chemicals and organic specialties for chemical distributor and manufacturer. Cover Metropolitan New York, New Jersey area. Send complete resume to Washine Chemical Corporation, 165 Main Street, Lodi, New Jersey.

Wanted Chemicals Assistant Sales Manager, thoroughly experienced to head active department with foreign trade organization. Substantial remuneration. Occasional foreign travel. Give full details. OPD 622.

Spencer Kellogg Elects

Spencer Kellogg & Sons, Inc., Buffalo, N. Y., has elected Fred W. Thomas executive vice-president. Mr. Thomas is a former president of Central Soya Company, Fort Wayne, Ind., and had served previously as director of the feed division and as executive administrator of the farm service division of General Mills.

Celanese, ICI

—Continued from page 3

Industries, Ltd. — also produces "Terylene."

Lindum Fibers—which is a name apparently subject to future change—will produce the fiber using such raw materials as ethylene glycol, dimethyl terephthalate and terephthalic acid, which the company plans to purchase on the open market here.

Celanese and ICI, since they are working with a widely-accepted fiber, plan to erect no pilot plant in this country as such.

Mr. Blancke explains that, as such plants are ordinarily constructed unit by unit, the first completed unit will serve as a pilot plant—as well as for the training of personnel.

Under a joint agreement, the subsidiary company will be the beneficiary of all polyester fiber research and development findings by both ICI and Celanese, as well as the rights to patents of both parent firms in the polyester fiber field.

"Teron" will be produced in both fiber and staple forms. It is expected to figure prominently in wool and cotton blend fabrics, providing what is said to be outstanding crease retention, wrinkle resistance and ease of care.

Airco, Matico Form

—Continued from page 3

duce substantial quantities of a new type of plasticizer. Acetylene, one of the major raw materials, will be supplied by Air Reduction.

Capital cost of the new plant, which will be built adjacent to existing Air Reduction facilities at Calvert City, is estimated at approximately $10 million. Blaw-Knox Company, engineer-contractors of Pittsburgh, Pa., has been engaged in the design phase of the new plant for several months and will start construction this fall. Completion is expected by early 1960.

Cumberland Chemical, of which Mr. Hill will be chairman and Mr. Milstein, vice-chairman, will be managed by Air Reduction Chemical Company. C. J. McFarlin, president of the chemical company, will also serve as president of Cumberland. Other board members of the new corporation are J. D. Gunther, a vice-president of Air Reduction, and R. B. Schneider, a vice-president of Empire Trust Company.

Air Reduction has nine operating divisions producing a diversified line of products including industrial gases and chemicals. The new facility at Calvert City will be the corporation's seventh plant to be built in recent years at the west Kentucky industrial and chemical center.

Mastic Tile is a producer of floor tile with plants in Newburgh, N. Y.; Houston, Tex.; Joliet, Ill.; and Long Beach, Cal.

Radioactivity in Foods

—Continued from page 7

and Frank A. Vorhes, jr., president of AOAC, will speak on "Food Additives."

An entire session will be devoted to the discussion of the mysterious "chicken edema disease" by scientists from Ralston-Purina Company, Proctor & Gamble Company, Quaker Oats Company, Central Soya Company, and the Food & Drug Administration.

The annual banquet, to be held Monday evening, October 13, will be addressed by Prof. Frederick F. Stephan, Princeton University, who will speak on "Public Information and Public Opinion, or Do We Need a Pure Facts and Data Act?"

At this banquet the annual AOAC Harvey W. Wiley Award will be presented to Kenneth D. Jacob of the Department of Agriculture for his work on phosphate technology and methodology.

Ammonium Nitrate Unit

—Continued from page 5

trate plant, a warehouse, a maintenance shop, a paper shell processing house, a laundry and several units required for raw material preparation.

"Consumption of industrial high explosives by all major consuming industries, including mining, quarrying, and construction, has increased rapidly in recent years," Dr. Bowman said, "and this growth is expected to continue. It is estimated that by 1960 the construction industries, stimulated by the federal highway program, will consume half of the country's annual output of industrial high explosives."

Imports at US Ports

—Continued from page 63

RUTILE SAND—1,986 bgs, Samuels Co, Brisbane
SHELLAC—100 bgs, Brown Bros & Harrimann, Bremen
SODIUM BICARBONATE—996 bgs, Chemical Manufacturing Co, Liverpool
SODIUM CYANIDE—120 dms, Hardy Inc, Havre
SODIUM SILICOFLUORIDE—500 bgs, Sundheimer Co, Hamburg
600 bgs, Nelson Co, Rotterdam
SULFUR, CRUDE—4,304 tons, E I du Pont de Nemours & Co, Coatzacoalcos
TAPIOCA FLOUR—1,000 bgs, Bank of China, Keelung
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Market Research Is Now Indispensable, CMRA Is Told

—Continued from page 7

as a case history his company's "Polyox" resins.

A company undertaking a new line must organize for it, he pointed out, considering the following factors: climate, resources, selection and action. Speaking of the first factor—climate—Dr. Bateman said:

"Planning for successful marketing of a new product or product line requires that the whole business scheme of a company be geared for action."

Speaking of the second factor—resources—Dr. Bateman went on:

"Given a climate in which ideas can flourish, there must next be resources of people and stored applicable knowledge or data. These resources must exist since they can rarely be brought into being on short notice to exploit a particular product or product line at a particular time."

To explain his third point—selection—Dr. Bateman said that as work on the "Polyox" line advanced, there were postulated specific possible uses for the partically-developed materials.

"Of these postulated uses, some were obvious (perhaps by direct analogy with existing materials); some represented an extension of uses for existing materials made possible by the unique properties of the "Polyox" group of resins; some were just imaginative ideas, whose generation is difficult to trace, except to the people concerned. We had now focused on specific possible uses, probable or improbable, in the markets postulated (without any clear indication that the "Polyox" line would be directly applicable). The Market Research group now concentrated on developing information and drawing on its data resources to appraise potential in areas postulated for 'Polyox,'" Dr. Bateman continued.

Regarding the fourth factor—action—Dr. Bateman said that after primary emphasis on controls passed to the hands of the market development group, "limited commercial quantities of the various grades of 'polyox' water-soluble resins were produced for sample and inventory purposes, and while this was being accomplished, the many functions of market development in preparation for a product announcement were being carried out."

He concluded, "Market research held a key position in this development stage."

Mr. Corley went into the history of his company's development of a new line, pointing out that "the plain truth is that there was no marketing research in connection with our company's decision to begin the basic research program that evolved a line of high molecular weight aliphatic chemicals."

In winding up his speech, this is how Mr. Corley sized up market research:

"Since 1943 marketing research has been a permanent part of our chemical division. It has played a very important role in assessing market volume and profit potentials on all of the items produced by this division. Marketing research has been the management guide that has determined all of our plant expansions and marketing policy since the time when we were able to develop enough markets to research."

Researching Another Company

Mr. Frisselle, speaking on market research as used in estimating the potential of a company that another company is thinking of purchasing, said:

"There are a number of considerations in the investigation of another company's market which do not arise when we look at the market for our own new products. In the investigation for our own products, the principal concern is not to reveal too much about our intention to produce them.

"The situation in the purchase of another company, however, is one of not letting anyone know that you are considering buying the company. It behooves the market researcher, therefore, not to mention that the company is being considered for purchase but rather to investigate the market for the company's products under the guise of considering entry into the same field as a competitor of the company being considered.

"This has the advantage of appealing to those people who have had some problems with the company under consideration and also brings a glint to the eye of many purchasing agents as they contemplate an additional supplier, possible over-production and subsequent lower prices. Thus, it is fairly easy to get market information without revealing ones true interest.

"The market researcher in this case," Mr. Frisselle went on, "also has the advantage that the people hoping to sell their company to his are eager to supply end-use information, market estimates, sales figures and all manner of data. This immediately lays to rest all of the questions concerning what is going on now and transfers our interest to what will happen in the future. It is remarkable to view the optimism of the people attempting to sell their company about almost any conceivable future market for their products."

Scientific Decision-Making

—Continued from page 7

anything which can be solved by hand calculation can also be taught to the machine. The factors which must be weighed in deciding whether or not to use a computer for solution of problems are:

- The amount of human effort needed to write the program.
- The amount of machine time which will be used once the program is written.
- The total amount of human effort necessary to perform the calculation without the help of the computer.
- The economic worth of the answer to the problem.

Tips On Interviewing

Miss Audrey Langdon, of W. Alec Jordan Associates, New York, offered tips in a paper entitled, "Getting More Out of Interviewing." Pointing out that interviewing is a technic that needs developing, Miss Langdon said:

"With conscious effort it is possible to increase your efficiency by at least 30 or 40 percent. In actual field experience, interviewers who differ in ability, approach and interest are able to get almost twice as much information per call after a review of interviewing basics."

John D. Porter, of American Mutual Liability Insurance Company, Boston, talking of the possible inclusion of electronic data processing, had this to say:

"The development of an EDP program depends upon understanding the company's objectives and implementing them with suitable equipment and staff."

Lead, Zinc Importers Start 'Scramble'

—Continued from page 4

tries, nevertheless had nothing immediate to say.

The Chamber of Deputies in Peru disapproved the action and threatened to recall as a protest, its foreign minister from a meeting he is attending in Washington.

Yugoslav officials and exporters generally sidestepped comment, but in South Africa observers were quick to point out that the quotas would probably cost their country considerable sums.

West German business leaders were surprised by the action. Producers there are expected to increase their efforts to obtain government protection for their industries as a result of the United States move.

How the Percentages Figure

Figured on an annual basis, the quotas established by President Eisenhower limit imports of lead to 354,720 short tons and zinc to 520,960 short tons. This is 80 percent of the imports of dutiable lead and zinc imported during the five years 1953-57, but compared with 1957 imports, a reduction of 31 percent and 41 percent respectively.

There was no assurance that the annual figure will govern however. The President's proclamation fixes the quotas on a quarterly basis, with no mention of unused portions of the quota carried over to the next quarter. No annual ceiling is mentioned anywhere in the proclamation.

The quotas are allocated among the exporting countries and subdivided by tariff schedule classifications. For lead-bearing ores, flue dust and matters of all kinds, the following quarterly quota, in short tons, is established:

Peru	8,080
Union of South Africa	7,440
Canada	6,720
Australia	5,040
Bolivia	2,520
All others	3,200

Quotas in short tons, for lead bullion or base bullion, lead in pigs and bars, lead dross, reclaimed lead, scrap lead, antimonial lead, antimonial scrap lead, type metal, and all alloys or combinations of lead not specially provided for are as follows (Babbitt metal and solder are excepted from the quota):

Mexico	18,440
Australia	11,840
Canada	7,960
Yugoslavia	7,880
Peru	6,440
All others	3,040

Quotas, in short tons, for zinc-bearing ores of all kinds, except pyrites containing not over three percent of zinc are:

Mexico	35,240
Canada	33,240
Peru	17,560
All others	8,920

For zinc in blocks, pigs, or slabs, worn out zinc and zinc skimmings, the quota, in short tons, is:

Canada	18,920
Belgium and Luxembourg	3,760
Mexico	3,160
Belgium Congo	2,720
Peru	1,880
Italy	1,800
All others	3,040

The quotas are somewhat higher than those that had been recommended by three of the Tariff Commissioners favoring the fullest possible aid to the domestic producers, but in this connection this was offset by the refusal of the President to go along with the other recommendations of this group that tariffs be increased on the metals.

In identical letters to the chairmen of the senate finance committee and the house ways and means committee, Mr. Eisenhower recognized that the "imposition of quotas is an unusual step, but it is better suited than a tariff increase to the unique circumstances of the case and more likely to lead to enduring solutions beneficial to the entire lead and zinc industry."

The President's letter also emphasized the importance to friendly countries of their exports to us, the world-wide nature of the present condition of lead and zinc overproduction, and the need for sharing the burdens of this problem. The United States has been discussing this problem with other countries and the President is hopeful that mutually acceptable solutions can be found.

Speaking at the annual meeting of the American Mining Congress last week, Walter L. Rice, vice-president of Reynolds Metals Company, urged a revision of national policy on metal imports which would effectively combat the dumping and price slashing tactics of Russia. He urged the mining congress to appoint a committee to study the problems and make concrete recommendations to appropriate government agencies.

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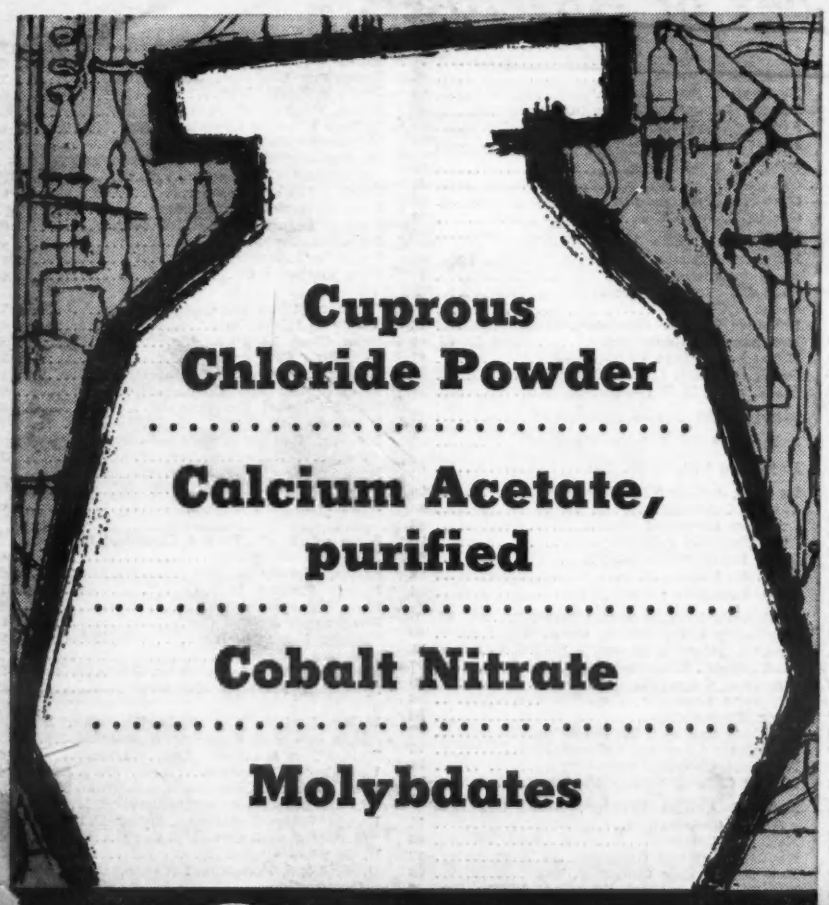

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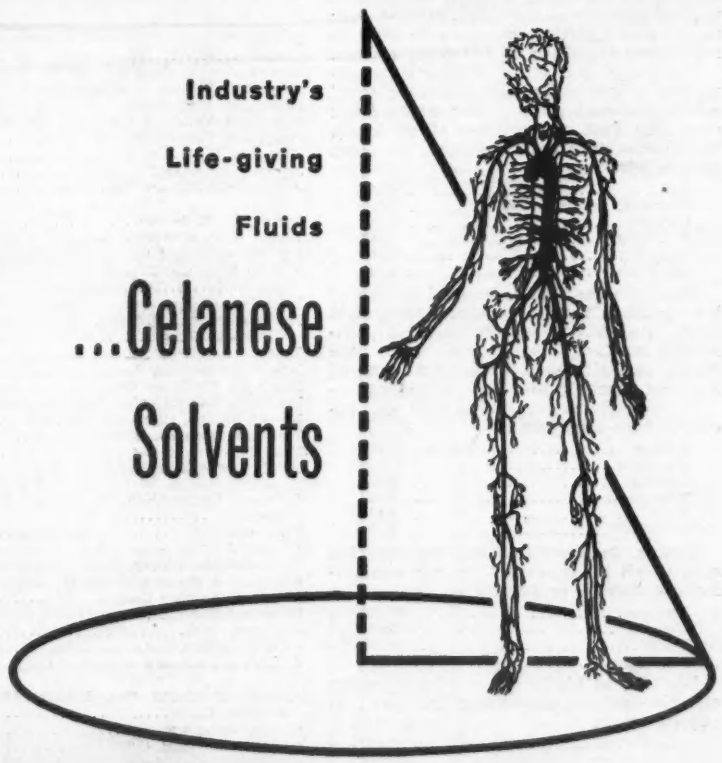

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